

ISSUED EVERY WEDNESDAY

# DRUG & CHEMICAL MARKETS

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NEW YORK, FEBRUARY 20, 1918

No. 24

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## Wealth In Waste Products.

The war is teaching Americans that the wealth in waste products is worth going after, and new industries are springing up all over the country. The wonderful development of coal-tar products within a few years has stimulated interest in other lines, particularly in the lumber trade, and the waste products of the mills and the forest litter are now made into paper, or distilled for the alcohol content and for the sugar, acetate and charcoal, which can be economically extracted and turned into profit under the magic wand of the modern chemist.

Cottonseed has been made to yield food values and oils, and the South has established mills to crush the former waste which filled the rivers and was swept out to sea. The peanut, too, is now doubled in value because of the oil extracted. The packing industry is making adrenaline from the suprarenal glands of sheep; still another source of wealth in spite of the declaration of a Chicagoan that his company utilized every part of the sheep but the bleat and all of the pig but the squeal.

It has recently been discovered that the materials used in dry batteries are not entirely consumed and can be recovered in the form of zinc and manganese salts, and a manufacturer figures that he can allow two cents apiece for exhausted batteries and make money. Potash is being recovered from molasses and from cement, tannin from the bark of the western hemlock, oil for making rubber substitutes is taken from fish offal, and the saline deposits of the western plains are made to yield magnesium sulphate and sal soda.

## Supplying Drugs for the Army.

The caution displayed by the Government in buying drug supplies for the army, undoubtedly prevented panic prices in the market and shut out the profiteers, but the credit for the systematic methods employed must be given to the manufacturers of chemicals and pharmaceuticals. It was in April of last year that the manufacturers devised means for handling the Government business to suit the peculiar conditions surrounding production in the different groups.

It was found that the Government lists called for 100,000 pounds of quinine which it would be impossible to supply. The proposals were prepared on a basis of supplies for one year for an army of 1,000,000 men. The list called for 20,000 pounds of phenacetin which was so scarce that it was hardly obtainable even in small quantities. The committee



of manufacturers suggested the substitution of acetanilid, and in this case and in many other perplexing situations was able to bring the estimates within the realm of commercial possibility. More than six million containers were called for. Owing to the labor conditions and the restricted capacity of factories making bottles and boxes, it was realized that no one would bid on the quantities indicated.

It was recommended that the amounts be cut to 25 per cent. of the Government estimates, and this suggestion was accepted, and the supplies limited to the quantity needed for one year for 250,000 men.

Calls for bids are accordingly made every three months for supplies for 1,000,000 men. It was also decided that prevailing trade customs in sizes and styles of containers, weights and measures and other details should be followed. The result was gratifying. Competitive bidding brought lower prices than was expected, due in part to the fact that some manufacturers had raw materials on hand which were purchased before the market got into the hands of speculators. Many manufacturers, actuated by patriotic motives, have shaded their bids since the first contracts were awarded, having found it possible to do so after filling one order.

Items in the list prepared for pharmaceutical and chemical manufacturers are divided into the following groups: Chemicals, proprietary articles, whole and powdered drugs and miscellaneous crude materials, pharmaceutical products, essential oils including menthol and thymol. A list of representative houses manufacturing the various commodities was furnished the Government.

The Executive Committee representing the manufacturers also worked many days preparing a list of equivalents for drugs which had increased in price so much as to make their use prohibitive. In some cases the increase in cost above normal was 1,000 per cent. The manufacturers of drugs and chemicals seem to be doing their bit.

### Prosperity Through Foreign Trade

After-war problems are to be discussed at the Cincinnati meeting of the National Foreign Trade Council in April. Men who have made a success of foreign business as well as men who have just begun to accept orders from the neutral countries which are appealing to American manufacturers for goods will be in attendance. The best ways to maintain the overseas commerce which has been practically thrust upon the United States will be considered.

The first point under discussion will be the part that foreign trade must assume in winning the war. The necessity for developing the country's resources, the building of a merchant marine, the organization of the railroads, the textile and chemical industries, and lumber and steel production, and the methods of financing all these projects with a view to expanding exports are subjects on the programme. Foreign trade after the war will

then be taken up, and manufacturers and exporters will be asked their views on how to hold the gains, how to meet the after-war conditions, how to eliminate waste and conserve our resources. Other topics are the problems of obtaining raw materials, and the best methods of co-operating to obtain trade in countries which have heretofore bought their supplies in Europe.

The broad scope of the convention is shown by the world-wide problems to be discussed, including the extension of the overseas trade across the Pacific. In the so-called group sections, in which special subjects will be considered, foreign credits and banking, education for foreign trade and information for beginners are among the practical features scheduled. It will be a working convention and even the banquet will be made a part of the "work" programme by introducing speakers who will talk on subjects of importance to foreign traders. The slogan of the Council is "Greater Prosperity through Greater Foreign Trade."

### Sound Foundations Wanted

There are possibilities of currency inflation in the war finance corporation bill which do not appeal to the conservative manufacturer, especially to the chemical and dyestuff manufacturer, for if we are to continue to develop these industries in the post-war period, we need the soundest and firmest financial foundations upon which to build.

The bill as it stands provides for notes "to mature not less than one year nor more than five years" from the date of their issue, and for their public sale at prices fixed by the corporation's management. So far these notes differ little in substance from the ordinary government or private short term obligations. But, unfortunately the bill does not stop here. It further provides that "any Federal Reserve bank acquiring by purchase or rediscount such paper secured by the notes or obligations of the War Finance Corporation may, with the approval of the Federal Reserve Board, use such paper so acquired for any purpose for which it is authorized to use paper secured by bonds or notes of the United States."

With only the approval of the Federal Reserve Board to be won, it is possible to transform these short term obligations into currency. There are dangerous possibilities of inflation lurking in these provisions, possibilities that should never be allowed to become probabilities by the passage of the bill.

### Dyestuffs Stand the Test

American dyestuffs manufacturers are to be congratulated on the record they have made in supplying colors for Government use in dyeing uniforms and for color printing. The statement was made recently at a gathering of textile and dyestuff manufacturers that "out of the millions of yards of cloth that have been delivered since American dyestuffs have been used, not a yard has been returned on account of any defect in dyestuffs."



# Wealth Found in Waste Products

## *Savings Effected in the Packing Industry, In Lumber, Cotton, Beet Sugar and Gas Manufacture*

By DR. H. E. HOWE, of Arthur E. Little, Inc.

**W**ASTE is so common in most industries that those responsible for it come to regard it as essential, and like many in the lumber industry, allow the sawdust to blind them. It sometimes happens that unpreventable waste does not occur concentrated in sufficient quantity to make its economic utilization as raw material possible, but for those who doubt the gospel of research, and are inclined to be sceptical concerning its potency as applied to waste problems, a few examples may prove convincing.

Perhaps no other industry is so great an offender as is lumbering. In many instances fully 65% of the tree remains unused, but this forest litter and mill waste in excess of fuel requirements is attractive as a raw material for several industries. One of the Southern lumber companies has just completed a paper mill costing one and one-half million dollars, it having been demonstrated that kraft and other varieties of papers may be made from their wood waste at a profit which in normal times equals or exceeds that from their lumbering operations.

There are two plants in America making ethyl or grain alcohol from wood waste by a process which hydrolyzes a part of the cellulose to soluble and fermentable sugars. These are extracted, fermented, and the alcohol then distilled off to be further purified. Notwithstanding many technical difficulties and the fact that the process has had to withstand a long period of experimental work, these plants show promise in normal times, and the recent high alcohol prices have made their operation attractive.

Closely related is the process for producing alcohol of a high quality from waste sulphite pulp liquors, in which are to be found the gums and other fermentable materials of the wood. Five million gallons of ethyl alcohol were made from these waste liquors by fermentation processes during the last year in Sweden, and one plant is operating this process in the United States.

The distillation of waste wood has recently been made possible through the perfection of a retort, into which waste may be fed continuously and automatically, the charcoal being discharged in the same manner. In this device the explosion hazard which has defeated previous projects has been eliminated because of the possibility of charging and discharging the retort without the admission of air. The alcohol, acetate, charcoal and other products are of high quality, and the method will make it possible to turn vast quantities of waste into profit.

Some time ago it was stated that chemistry had added more than eleven dollars to the value of each bale of cotton raised in the South, and this, through the new industries built upon cottonseed products. These products are daily becoming of more value through such processes as the hydrogenation of oils and superior refining methods as well as the natural increase in the food values represented, so that the eleven dollars per bale is much too low a valuation to place upon the achievements of chemistry in handling a waste which at one time was such a nuisance that certain southern states passed laws to prevent the clogging of the streams due to such quantities of cottonseed being dumped into them.

There are two materials generally wasted, or available in excess of present requirements, which new electrochemical methods may turn into profit. These are hydrogen and methane which is "dry" natural gas. By subjecting the heavy hydrocarbon from petroleum stills to a suitable electric current in the presence of these gases, the organic molecules are rearranged and gasoline produced with a power cost as low as 4-10 cent per grain of product.

Of timely interest is the fact that trinitrotoluol known as "T. N. T." may properly be considered a waste product which has momentarily become of great importance, more so than the product which originally was the principal one. In the nitration of toluol two mononitrotoluols were produced and while one of these was suitable as a dye intermediate, the other was a useless product some years ago, and scientists expended much time and money in an effort to reduce its production and find ways to profitably utilize the great stocks which were continually being produced. Suddenly this activity ceased without announcements as to reason and we have had to wait until the outbreak of the war to find the use to which the mono-nitrotoluol has been put. The early successes of German arms furnishes us with the answer.

A classical example of waste utilization is furnished by the Le Blanc Soda Process. Formerly the hydrochloric acid produced as a by-product was turned into sewers and had it not been for the uses found for hydrochloric acid the Le Blanc Process would long since have been entirely discarded in favor of the Solvay process.

The packing industry furnishes many examples of profitable waste utilization, and the statement has frequently been made with authority that without the profits from these wastes the edible portions of food animals would have to be sold at a considerable advance. The extent to which packing house wastes have been employed is illustrated in the manufacture of adrenaline, in the production of one pound of which the suprarenal glands of thirty thousand sheep are required.

Recent work has shown that a large part of the zinc and pyralucite in dry batteries is not consumed during the life of the battery, and that this material can be economically recovered in the form of zinc and manganese salts, at points where large numbers of the familiar "No. 6" batteries can be obtained within reasonable freight haul. It has been estimated that with present transportation charges an allowance of 2c can be made for exhausted batteries within a radius of three hundred miles of the recovery plant. When it is remembered that in 1914 there were more than seventy-one million dry batteries sold in this country, the probable importance of this waste utilization may be appreciated.

The claims for damage against certain cement plants long ago convinced the operators that they were losing valuable materials up their stacks but there were no efficient ways of recovering these and preventing the nuisance until the Cottrell process was introduced. Now this process has proven itself to be of more than usual value for it opens one way to break the German

potash monopoly. A cement plant in California where the climate makes storage easy, finds it possible to produce and store its cement on the revenue derived from the sale of the potash recovered from the fumes. This would seem an ideal solution of a waste problem for it eliminates the nuisance and resulting law suits while paying for the mill operation at the same time, besides leaving a profit.

Certain beet sugar refineries have installed processes for the recovery of potash from their molasses and other residues which heretofore have not been considered of much value excepting the small portion that went into cattle food and into the production of alcohol.

And so every field of industry has its examples of waste utilization; many plants are making full use of the benefits that may thus be derived. The necessity for making complete use of our natural resources constitutes a national duty for each individual manufacturer to apply research to the end that his own industrial wastes may contribute to our national wealth.

## Imports of Chemicals and Dyes

The 1917 activity of the manufacturers of the United States is evidenced by the fact that the value of manufacturing material imported in 1917 was double that of 1915. The value of manufacturing material imported, as shown by a compilation by The National City Bank of New York, in the calendar year 1917, was in round terms \$1,800,000,000 against \$957,000,000 in 1915 and \$874,000,000 in 1914. Manufacturing material formed in 1917, 61% of the total merchandise imported against 54% in 1915 and 49% in 1914.

Another evidence of the activity of the manufacturers of the United States in the year just ended, is found in the fact that the value of manufacturers exported in the calendar year 1917 aggregated nearly \$4,000,000,000 against \$1,791,000,000 in 1915 and \$974,000,000 in 1914.

Among the imports at the port of New York in December last, were the following products admitted free of duty:

Arsenic .....	66,671	Copper ore .....	1,273,572
Quebracho .....	1,319,749	Copper bars, unrefined..	8,058,374
Other tanning extracts..	25,367	Corkwood .....	163,401
Copal .....	55,294	Dyewoods .....	34,161
Shellac .....	61,697	Oils—animal .....	221,981
Other Gums .....	26,126	Crude .....	113,878
Iodine .....	31,061	Benzine .....	193,672
Lactarene .....	166,829	Other refined .....	300,247
Carbonate of potash.....	409,926	Oléo stearin .....	175,323
Nitrate of potash.....	42,462	Sugar beet seed .....	782,546
Nitrate of soda .....	1,015,383	Sulphur ore .....	113,002
Other chemicals .....	402,013	Quebracho wood .....	25,895
Jocoe .....	2,120,040	Other tanning material..	61,884
Coffee .....	\$4,471,606		

The dutiable imports at New York in December included:

Antimony matte .....	\$236,782	Camphor-refined .....	\$ 77,344
Bristles .....	359,189	Chicle .....	96,377
Brushes .....	105,545	Other gums .....	104,512
Acids—oxalic .....	12,599	Opium .....	40,960
Acids other .....	55,303	Salts of potash .....	40,839
Argols .....	668,348	Vanilla beans .....	68,848
Colors or dyes .....	145,792	Other chemicals .....	593,520
Fusil oil .....	69,813	Indigo, natural .....	123,000

The value of the dutiable imports of all classes was \$36,201,760; the imports admitted free in December were valued at \$55,309,711.

## BIDS ASKED FOR MEDICAL SUPPLIES

The Field Medical Supply Depot of the United States Army, Washington, D. C., has requested bids for 1,000 bottles codeina sulphas, 32 mgm. tablets, 500 in a bottle, and 5,000 bottles sodii carbonas monohydratus (for surgical use) ½ pound in a bottle. Quotations must reach the supply depot not later than February 23.

## Saving Pacific Coast Waste

The waste wood of the Pacific Coast destructive distillation yields quantities of alcohol, acetone and acetate of lime, which are intermediate between the quantities obtained from the Southern pine and from hardwood. The demand for charcoal for metallurgical purposes is increasing in the Northwest. With certain modern improvements in distillation, whereby the refining costs are greatly reduced, it is probable that a profitable industry could be established from this waste wood as a material. Much could be done if the practice of clean logging, and the consequent production of forest cordwood, should be undertaken, says Prof. H. K. Benson, of the department of chemistry, University of Washington, Seattle.

The research work done in the laboratory of the University of Washington indicates that the bark of the Western hemlock, of douglas fir, Western larch and yellow pine are all sufficiently rich in tannin to be considered as suitable material for the manufacture of tannin extract. In many cases in our paper mills this bark must all be carefully removed, after which it is burned as a fuel in order to get rid of it. We are satisfied that both the quality and quantity of such extract is satisfactory for the tanning of leather, and it is only a question of time when the bark of our lumbering operations will be utilized in this way.

Only a small percentage of fish offal is being utilized at the present time for the manufacture of oil and fertilizer. Some experimental work and one small commercial plant have demonstrated that the fish oil can be advantageously used in the production of rubber substitutes. If the fisheries industry would undertake the conversion of its waste material into commercial commodities it would serve as a great stimulus for the production of the secondary products.

The Northwest has also a number of saline deposits, which until recently have been unutilized and from these are now produced magnesium sulphate in commercial quantities; others are about to produce sal soda. Many of them contain sodium sulphate, while some of them contain potash in such quantities as to warrant its recovery.

## COMMITTEE ON DYESTUFFS TARIFF

The Dyestuffs Association of America has named a committee to study the tariff question. The members of the committee are Dr. J. Merritt Matthews, August Merz, of Heller & Merz; R. T. Dicks, of Dicks, David Co., and H. G. McKerrow, of E. F. Drew & Co., all of New York; L. A. Ault, of the Ault & Wiborg Co., Cincinnati; and C. S. Althouse, of the Althouse Chemical Co., Reading, Pa.

Meetings have been held to systematize the information collected and suggestions made by dye manufacturers, in order to present the material to the United States Tariff Commission. It is believed that the committee will be able to render a valuable report on the outcome of the tariff negotiations at the meeting scheduled for March 6, at the Chemists' Club, when a permanent organization will be effected.

The by-laws have been drafted and will be put before the meeting for ratification or amendment, and a recommendation as to the permanent officers of the Association will be made for the consideration of the representatives present.

"Properties of Portland Cement Having a High Magnesia Content," is the subject of Technologic Paper No. 102, which has been published by the United States Bureau of Standards.

**MADERO BROTHERS IN RECEIVERS' HANDS****Arrest of Tonko Milic Discloses Transactions With New York Banks Amounting to \$218,000, Based on Warehouse Receipts—Some of the Creditors**

Receivers took charge of Madero Brothers' business on Monday, Feb. 18, when an involuntary petition in bankruptcy was filed in the Federal District Court, New York, by three creditors. Other claims will be filed at once. The first creditors to take action were the New York Consolidated Drug Company, \$2,000; Edward J. Barry, \$144, and Rockhill & Viator, \$4,000. But it was said that other claims, some of them ranging as high as \$35,000, would be filed with the court within a short time.

A report made by the company for the year ended Dec. 31, 1917, gave the assets as worth \$757,068.66, and the liabilities \$355,962.59. In the list of liabilities were loans from banks, \$104,865; bills payable, \$134,188.20, and merchandise unpaid, \$116,909.59.

The firm consists of three uncles of the late President of Mexico, Francisco Madero. They are Ernesto, Salvador, and Alberto Madero. Ernesto is the President of the firm. He is now on his way here from Texas, where he has been attending to some of the firm's widely scattered interests. Ernesto was the financial official of Mexico when his nephew was President, but when Carranza became President he not only deposed him but seized all of the property of the Madero brothers. Later the property was returned.

Shortly after the petition in bankruptcy had been filed Judge Mayer named Samuel Strasbourger and Nathan A. Smyth, receivers. With their counsel, Irving L. Ernst, and Charles A. Kalish, counsel for the petitioning creditors, they began at once an examination of the company's affairs. The concern occupies a four-story building at 100 John Street, and it also has offices at 115 Broadway. The business was incorporated in this State in 1913 with a capital of \$1,000,000, of which \$264,600 is outstanding. It has been a very large advertiser, having spent hundreds of thousands of dollars in seeking business through publications in various parts of the world.

The troubles of the firm became public, last week, when Tonko Milic, an Austrian, head of the chemical department, was arrested for obtaining money under false pretenses. On Feb. 6 officers of the Army and Navy Intelligence Service seized thirty-two cases of salicylic acid on Pier 7 in Brooklyn, where they were awaiting shipment to the military hospitals in Italy. It was said that a representative of Felice Misleri of Milan had ordered from Madero Brothers thirty-two cases of quinine, that the salicylic acid had been substituted for the quinine, and that those responsible for the substitution must have some connection with Madero Brothers, who had received the order. The investigation which followed resulted in the arrests of Milic, Harry Caldwell, proprietor of the Hanover Warehouse in Water Street and Saul Winkler, another employe of the firm. All of the prisoners were held in bail for examination on Thursday, Feb. 21.

It has since been learned that the Bank of Commerce, the Guaranty Trust Company, and the Equitable Trust Company had loaned on warehouse receipts, said to be the property of the firm, \$218,000.

Mr. Kalish, counsel for the creditors, said that he understood word had been received from the President of the firm that nobody would lose anything.

Louis K. Liggett, president of the United Drug Co. of Boston, has been elected a director of the Winchester Repeating Arms Co.

**Scarcity of Chrome Ore**

Chromic ore has been taken over by the government. The importance of chromium as an ingredient of steels used for making armor plate, armor-piercing projectiles, automobiles, and high-speed tools, has been greatly increased on account of the war, says Dr. Heinrich Ries in *Mineral Foote Notes*. Moreover, the shutting off of sources of supply usually drawn upon by the United States, has served to greatly increase the North American production.

The element chromium was discovered about 1797 by Vauquelin, in experimenting with a new mineral crocoite from which he reduced the chromic oxide and isolated the metal. This mineral had been found in Siberia in 1762, and analyzed without discovering the new element. It was also found that the salts of chromic acid and especially the oxides of chromium had beautiful coloring powers.

The known supply of chromium ore at that time was limited, and in 1798 the only commercial ore known to science was the mineral then described as chromic iron and found in the Urals of Russia. It was not until 1872 that discoveries of chromic ore were made on the North American Continent. The Baltimore, Md., region is said to have supplied practically the world's consumption until about the time the Civil War started.

Some idea of the importance of foreign sources of supply to the United States in recent years may be gained from the fact that the imports in 1916 amounted to 114,655 long tons. Of this Rhodesia supplied about 62,000 long tons, and New Caledonia about 34,000 long tons. The United States production rose from 244 long tons in 1913 to more than 47,000 long tons in 1916. California ore, in 1916, brought from \$28.86 to \$34.96 per ton at the eastern seaboard.

**MANY N. J. FACTORIES SHUT DOWN**

Many leading industries in New Jersey were seriously affected by the order of the Public Electric Company, a subsidiary of the Public Service Corporation, closing down the electric power, owing to lack of coal. As several of the larger plants generate their own power the proportion of hands out of work is not as large as the proportion of industries idle. No exact figures can be obtained of those idle, but it is estimated at 15,000.

Of the plants shut down, it is estimated that more than 70 per cent. of their product at the present time is for war purposes. This includes the Crucible Steel Company, the Whitlock Cordage Company, which has been working day and night on Government orders; the Sneed Iron Works, the Davis-Bournonville Company, makers of aero parts; the Vorhees Rubber Company; the Brady Brass Company, the Mutual Chemical Company and the Mallinckrodt Chemical Company.

**EARNINGS OF AMERICAN CAN CO.**

The American Can Co. reports for the year ended Dec. 31, last, a balance available for the common stock, after all deductions, of \$5,309,674, or 12.87% on the outstanding shares, which compares with \$5,076,650 last year. The net earnings before depreciation, interest charges and reserve for taxes was \$21,995,042, compared with \$11,091,048 for the 12 months ended Dec. 31, 1916. The company has reserved \$6,000,000 for Federal taxes and has written off for depreciation \$3,500,000 which is \$1,000,000 more than in the preceding year. Net earnings for the period are the largest in the history of the company.



## VIEWS OF DRUG AND CHEMICAL TRADE ON CONTROL OF IMPORTS AND EXPORTS

### License System Likely to Restrict Importation of Many Products—Allies May Suffer Loss of Trade in Raw Materials—Not Stringent at First

President Wilson's proclamations announcing Government control of foreign trade make it necessary to secure licenses for shipping or receiving goods in export or import business. The purpose is to make available tonnage for the transportation of an army of 1,500,000 men to France this year and for the movement of the supplies which such an army will require. Confidence exists that, taken in conjunction with the speeding up of shipbuilding, this object will be attained.

Importing firms are more critical of the Government plan than the exporters who had become more or less reconciled to Federal control during the few months that regulations have been in force regarding the exportation of certain products. The importers say that practically all the steamships coming from Europe are empty and that the license requirement will reduce the imports. Shipping men say that it will work a hardship on American business men, who need the imported materials, and that it will cut off revenue from our allies who sell us the materials as well as deprive them or American shipowners of the freight rates.

It is said that at the outset the War Trade Board, to whose charge the foreign trade of the United States is assigned, will be lenient, stopping only such imports and exports as are clearly incompatible with the tonnage requirements of transatlantic service. Moreover, the idea will be always in the mind of the authorities that too stringent restriction of foreign commerce at the start would be as disastrous to the Allied cause, because of the disturbance it would create, as to permit the continuance of trade without a check.

The Treasury Department, acting on a request from the War Trade Board, has instructed collectors to accept shippers' export declarations in lieu of individual license for all goods which have not hitherto required a license when it can be shown to the satisfaction of the collector that the goods are covered by either a bill of lading marked "for export" or a through export bill of lading provided the bill of lading is dated February 19, 1918, or earlier, and further provided that the goods are actually exported by March 15.

The Japanese trade will be pretty hard hit in spite of the assurances that any cut down will be gradual and that care will be exercised to do as little injury as possible to the nation's foreign trade. Aside from arousing widespread discussion in drug and chemical trade circles, the announcement from Washington in regard to Federal control of all imports and exports was without influence. The opinion was expressed in the trade, however, that the new regulations would be likely sooner or later to have a rather marked effect upon certain commodities, especially in the case of imports. Many products of foreign origin have been forced to abnormally high prices, owing to gradually increasing scarcity due to the steadily diminishing supply of ocean tonnage, and many expressed the belief that the new regulations covering importations will be reflected in increased stringency and still further advances in prices.

As to exports it was pointed out that the export channels have been steadily growing narrower in recent months by reason of the addition of many articles to the list, for which permits were necessary to ship

out products abroad, and that for this reason the new regulation covering export trade would prove less burdensome than was at first feared.

In interviews with the leading factors various opinions were expressed to a representative of DRUG AND CHEMICAL MARKETS. Several large importers and exporters said they did not know where they stood.

From time to time since America entered the War various chemicals, crudes and intermediates have been placed on the prohibition export list until practically all of the important items have been included. After obtaining the permit from Washington shippers often found that their product was refused at the pier at the last minute with the excuse that there was no more steamer space available, and the exporter was forced to await the sailing of another vessel. In the meantime he was obliged to pay storage on his material.

Now that licenses are required for the exportation of every commodity dealers are of the opinion that time and trouble will be saved and they will also know, when the Government grants an export license, that the shipment will go through. Steamer space will be given only to materials which the Government considers a necessity at the point to which they are going. At the same time, there are a number of important heavy chemicals that must be imported, such as nitrate of soda which comes from Chile. Then there are the various dyewoods and dye bases which are now used extensively in the American tanning and textile industries, but the Government is now a large buyer of a number of these materials imported and Washington will probably allow these necessities to be imported just as freely as heretofore. Some importers are of the opinion that the step was taken primarily for the purpose of supplying sufficient steamer bottoms to get larger stocks to this country in order that the rapid growth of America's new industries may not be retarded.

### REPLACING LOST EXPORT LICENSE

The War Trade Board announces that hereafter no duplicate of an export license which has been lost will be issued until an affidavit is made by the applicant, upon an approved form and filed with the War Trade Board, stating that the original license has been lost or destroyed and that no goods whatever have been shipped under said license, and agreeing that in case the original license is found, the applicant will return the same to the War Trade Board immediately; and further agreeing not to ship or attempt to ship any merchandise under the original license, under penalty of the law.

In order to avoid serious delay and congestion, it is of the utmost importance that exporters comply with the new regulations which provide that, on and after February 1, 1918, all shipments for exportation from the United States to any foreign country, including Canada, Newfoundland and Mexico, require four copies of the Shippers' Export Declaration. Transportation companies will, hereafter, refuse to accept shipments for exportation unless accompanied by the four copies of the Export Declaration.

All shipments made prior to February 15, 1918, and destined to Canada or Mexico via rail, vehicle or ferry, will not require the new form of Shippers' Export Declaration, which it was recently announced must be used in connection with export shipments made on or after February first, but may proceed under the present form of Shippers' Export Declaration, provided said form is filed in quadruplicate. All shipments leaving the United States by vessels bound for foreign ports on and after February first must be accompanied by the new Declaration form bearing the shippers' oath.

# Consumption of Colors in Silk Mills

## *Quantity Used and Prices Paid In 1916 Compared with 1913*

THE consumption of dyestuffs in the silk industry comprises the third division of the report of the United States Tariff Commission, entitled "The Dyestuffs Situation in the Textile Industries, 1913-1916." The cotton and woolen mill consumption was given in previous issues of Drug and Chemical Markets.

Table 4 summarizes the data for the consumption of dyestuffs and chemicals in 1913 and 1916 for eight representative silk manufacturers. Separate totals are given for 26 dyestuffs, the value of which represents 43 per cent. and 62 per cent. respectively, of the total value of all dyestuffs and chemicals used by the eight establishments in 1913 and 1916. Nineteen of these dyes are coal-tar products, while the remainder are natural or vegetable dyestuffs.

Sulphur black and direct black, which in 1913 were used in larger quantities than any other coal-tar dyestuffs, showed substantial increase in 1916. The only other coal-tar dyes which were used in increased quantities in 1916 are orange II, soluble blue, methylene blue, alkali blue and chrysophenine. Orange II, according to a statement from one of the manufacturers, has been made in this country for some time and even before the war was being supplied to American consumers in considerable quantities. Methylene blue is also manufactured in the United States. There was an increase in the quantities of the natural dyestuffs consumed, particularly logwood, cutch and sumac, Hematine, a refined extract from logwood, showed a decrease in the quantity consumed, but the decrease is more than offset by the increased use of the cruder logwood extract.

The average price paid for each of the dyestuffs for which the totals are given was greater in 1916 than in 1913. A number of these dyes, however, were from stock which was purchased in 1914 and 1915, and for this reason the average price does not give a true indication of value. In general, as in the cases of primuline, patent blue, chrysophenine and alkali blue, the higher prices correspond with the dyestuffs in which there was the greatest shortage. The increase in the total value of all the chemicals and dyestuffs used by the eight establishments amounted to 232.4 per cent., while the increase in quantity was only 19.8 per cent.

In response to the inquiry concerning the scarcity of dyestuffs in August, 1917, the silk manufacturers mentioned rhodamine, primuline, and certain other of the finer dyestuffs which are largely used in this industry. These include the principal triphenylmethane coloring matters, patent blue, silk blue, alkali blue and methyl violet; the vat colors made from anthraquinone and carbazol; the alizarin dyes and two important azo colors, benzopurpurine and chrysophenine.

On the whole, the practice of using substitutes does not obtain to any great extent in silk manufacture. Owing to the difficulty in obtaining satisfactory substitutes, many light and special shades were abandoned when the original dyestuffs were no longer available. There has been an increase in the use of the natural dyestuffs, particularly of logwood and cutch. Logwood, cutch and gambier produce blacks similar to those obtained from certain acid blacks which were formerly

imported from Germany. Mixtures of two or more American-made dyestuffs will often produce effects similar to those of the needed dyes. An example is found in the case of rhodamine which is substituted by a mixture of azo rubine and magenta.

Some of the opinions as to how American-made artificial dyes compare with imported dyes of the same class are quoted below:

"The American-made dyestuffs used by us in a very few cases are, in our own opinion, equal in quality, fastness and uniformity to the imported dyestuffs of the same class which we used prior to August, 1914; for example, acid orange and direct black have always been made in this country, and the former has, in many cases, even before the war, been furnished by American manufacturers to the German dyestuff importers."

"With the exception of sulphur black and direct black, the American-made synthetic dyestuffs are not as fast to light, etc., nor are the quality and uniformity as good as the imported dyestuff."

"Colors not as bright, lower in strength and not uniform in production. Considerable improvement in certain colors this year over the product of 1915."

"American-made artificial dyestuffs are almost as fast and as uniform as the imported dyestuffs. Their tinctorial value, however, is decidedly less; this, of course, will be remedied when production becomes greater."

"The American-made artificial dyestuffs are the equal of the imported dyestuffs of the same class as regards fastness and uniformity. As regards quality, I have found that the American-made dyestuffs are from two to three times as strong as the imported dyestuffs."

The requests for information concerning the operation of the present dyestuff schedule of the tariff, or suggestions as to desirable changes, brought replies from some of the large manufacturers of silk goods. These replies are quoted by the Commission without indorsement, criticism or comment.

"We do not consider that the present dyestuff schedule of the tariff has ever had an opportunity to demonstrate what the its effect upon the dyestuff industry will be, because the war itself has automatically shut off almost all importations of dyestuff. In our opinion, however, the eventual result will be that the rates will only prove sufficient to protect low-grade standard dyes and that it will not be possible for American manufacturers to produce highly refined high-grade specialties under the protection offered. We criticize the ad valorem feature of the tariff upon the ground that it has frequently proved in the past to be very difficult and often impossible to administer an ad valorem duty honestly, because of the difficulty in ascertaining the value of the goods. We favor specific rates."

"We believe the exigencies of commerce in this country are such as to justify the imposition of any tariff which the Commission may decide upon as necessary (after being in possession of all the elements entering into cost of production and avail-

able raw materials) to create a sufficient interest and a large enough incentive for inducing numerous establishments to produce the most varied output in dyes and chemicals."

"It is necessary to the development of the color business that a good liberal policy of protective tariff be adopted. The domestic plants have only scratched the surface of the color business, and the cost of development must be charged to color users, of which we are willing to pay our share."

"Assuming that suitable colors can be turned out in this country, then American capital should be protected against foreign made goods by a tariff

sufficiently high to cover United States manufacturers against loss. Our preference is for dyes made in the United States if quality is what it should be."

"Think that the present dyestuff schedule of the tariff is O. K. provided the cost of labor does not go higher. In case of increased cost of labor, the manufacturer should be protected."

"Regarding the protective tariff on dyestuffs, the American manufacturer has to improve his product considerably and standardize his colors before you can consider too high a tariff on foreign-made dyestuffs."

TABLE 4—DYESTUFFS USED BY EIGHT IMPORTANT SILK MANUFACTURERS, 1913 AND 1916.

Dyestuff	1913		1916		Average price paid per lb.		P. C. of inc.*	
	Quantity Pounds	Value	Quantity Pounds	Value	1913	1916	In total	value
Sulphur black	79,858	\$13,183	103,165	\$120,841	\$0.17	\$1.17	29.2	816.6
Direct black	31,833	7,035	39,636	44,053	.22	1.11	24.5	526.2
Azo yellow	10,303	4,482	5,400	23,920	.44	4.43	-47.6	433.7
Fast gray	12,411	11,131	4,377	12,812	.90	2.93	-64.7	15.1
Chrysophenine	1,222	878	3,991	34,028	.72	8.53	226.6	2,775.7
Primuline	4,400	1,598	3,318	17,778	.36	5.36	-24.6	1,012.5
Induline	3,700	2,133	3,255	3,402	.58	.93	-12.0	42.6
Orange II	1,237	222	3,133	2,975	.18	.95	153.3	1,240.1
Soluble blue	1,728	1,576	2,308	9,517	.91	4.12	33.6	503.9
Fast silk yellow	7,020	4,203	2,252	1,516	.60	.67	-67.9	-63.9
Methylene blue	1,225	688	1,980	2,971	.54	1.50	61.7	351.5
Quinoline yellow	2,405	817	1,667	2,537	.34	1.52	-30.7	210.5
Palatine black	13,474	3,836	896	1,032	.28	1.15	-93.4	-73.1
Methyl violet	1,647	1,214	1,057	1,788	.74	1.69	-35.8	47.3
Rhodamine	1,190	1,253	967	3,878	1.05	4.01	-18.7	209.5
Fast red	1,440	450	953	1,887	.31	1.98	-33.8	319.3
Alkali blue	688	523	936	5,553	.76	5.93	36.1	961.8
Brilliant green	2,176	1,087	1,177	1,717	.50	1.46	-45.9	58.0
Patent blue	2,027	2,190	440	3,183	1.08	7.24	-78.3	45.4
Gambier	167,829	9,417	214,162	23,063	.06	.11	27.6	144.9
Logwood	31,000	2,550	169,623	48,236	.08	.28	447.2	1,791.6
Cutch	32,400	2,250	77,549	9,635	.07	.12	139.4	328.2
Hematin	62,021	6,190	54,117	20,249	.10	.37	-12.7	227.1
Sumac	42,203	1,951	18,770	1,522	.05	.08	-55.5	-22.0
Fustic	7,000	420	9,917	1,641	.06	.17	41.7	290.7
Archil	8,829	942	3,537	1,149	.11	.33	-59.9	22.0
Chemicals and all other dyestuffs	531,266	\$82,189	728,584	\$400,523	\$0.15	\$0.55	37.1	387.3
	1,508,033	110,802	1,714,289	240,960	.07	.14	13.7	117.5
Total	2,039,299	\$192,991	2,442,873	\$641,483	\$0.09	\$0.26	19.8	232.4

\* A minus sign (-) denotes decrease.

### GERMAN SAGACITY IN LOCATING DYE PLANTS

Since the purchase of the German dyestuffs plant at Ellesmere Port on the Mersey River, England, by British manufacturers the number of colors produced there has been steadily increased. The chief demand at the present time is for colors to dye khaki, and the energies of the staff at Port Rainbow have been devoted to meeting it. The bulk of the production consists of newly patented colors made nowhere else in England, and especially adapted to the dyeing of khaki. Among the most important of these products may be mentioned Olive Brown SB, Mounsey Olive Brown and Chrome Yellow MY, by means of which the required shades for military cloth may be obtained with simple mixtures, applied by a process which combines large output and simplicity of application, together with a fastness superior to that obtained by any other process.

The works have good railroad facilities, but the German experts selected the site because it offered cheap transportation by water. The Germans brought their crude materials from the Fatherland. All the successful color manufacturers in Germany, with one exception, are situated either on the Rhine or on the navigable portion of its tributary, the Main. The exception to this rule is the Actiengesellschaft fuer Anilinfabrikation of Berlin, which has a moderate substitute for the Rhine in the River Spree, yet it is to be noted that this company has not been nearly so successful as those founded on the banks of the Rhine.

What does the Rhine mean to these large German works? It represents, first of all, the cheapest possible

means of transport, and only those who are well acquainted with the factories on that river know what a potent factor that has been in their success. It means also abundant and cheap water supply, and a convenient and economical means of disposal of effluents.

The duty of the committee of experts was to discover a site for a works which would possess advantages approximating as closely as possible to those of the parent factories on the banks of the Rhine. These conditions they found on the River Mersey. The committee had also another object in view when visiting Britain, in which they were not successful. They wished to purchase a large tar distilling concern so as to insure supplies of raw material for the new factory—a policy which has been followed in Germany.

### DYESTUFFS FROM SWITZERLAND

Dyestuffs constituted a large percentage of the exports invoiced at the American consulate at Basel, Switzerland, for the United States during 1917, according to invoices certified at the American consulate at that place. The shipments were as follows: Aniline colors, 1,598,542 pounds, valued at \$2,587,618, and artificial indigo, 1,532,100 pounds, valued at \$1,048,226.

### AETNA EXPLOSIVES CO. TO MAKE COLORS

The Aetna Explosives and Chemical Company is to build a plant at Huntington, Pa., which will be adapted for the manufacture of dyes and chemicals after the close of the war, when the orders for smokeless powder are expected to decrease. The buildings will cost about \$500,000.



## British Export Embargo Changes

Changes in the British embargo proclamation of May 10 have been cabled to the Department of Commerce by Consul General Skinner, London, as follows:

Proclamation of May 10 prohibiting exportation is further amended as shown below. Symbols used to indicate class of prohibition are as follows: (A) denoting prohibition to all destinations; (B) prohibition to all destinations other than British possessions and protectorates; (C) prohibition to all destinations in Europe and on the Mediterranean and Black Seas other than France, Russia, Italy, Spain and Portugal.

The following headings are added:

(A) Ambergis; candles; cartridges, charges of all kinds and component parts and tools and accessories for filling or repairing rifle and shotgun cartridges; caustic soda and mixtures; chlorides of tin; oxide of tin and compounds; vegetable fibers not specifically prohibited; firearms and component parts and tools and accessories connected therewith; all goods wholly or partly of flax and linen, except made-up wearing apparel; gum tragacanth; night lights; oakum; copying ink; pencils; fur and hair; sealskins; tapers; tin and its alloys; tin ore; wire rods and iron or steel wire and articles wholly thereof.

(B) Compounds of tin, except chlorides and oxide of tin; silk and silk manufactures of practically all kinds; manufactures of tin except hollowware; tin plate and receptacles made from tin plate.

(C) Vegetable fibers and tissues and manufactures thereof not specifically prohibited; made-up wearing apparel wholly or partly of flax and linen.

Certain additions listed above are extensions or modifications of former headings. The following old items are accordingly removed:

(A) Candles wholly or partly of paraffin wax or tallow; cartridges, charges of all kinds and their component parts; caustic soda; coir fiber; New Zealand flax fiber; rifled and unrifled fire arms and component parts; canvas hose; unbleached cloth, woven from bleached or unbleached flax yarns, whether pure cloth or yarn or mixed with other material, exceeding 8 ounces per square yard, or if of 8 ounces or less aggregating 96 threads or more per inch, warp and weft combined; linen thread; linen yarn; night lights wholly or partly of paraffin wax or tallow; iron wire and articles wholly thereof; iron wire rods; steel wire and articles wholly thereof; steel wire rods.

(B) Chlorides of tin; oxide of tin and compounds; gum tragacanth; oakum; untanned hair sealskins; silk and silk manufactures of practically all kinds; tin and alloys not specifically prohibited; tin ore.

(C) Candles unless wholly or partly of paraffin wax or tallow; compounds of tin except chlorides and oxide of tin; vegetable fibers not otherwise specifically prohibited and tissues and manufactures of such fibers; cloth woven from bleached or unbleached flax yarns not otherwise specifically prohibited, whether pure or mixed; goods wholly or partly of flax not otherwise prohibited; night lights unless wholly or partly of paraffin wax or tallow; manufactures of tin (except hollowware, tin plates and receptacles made from tin plates).

President Wilson has nominated Thomas W. Page to be a member of the United States Tariff Board. Professor Page now holds the chair of economics at the University of Virginia. He will succeed Daniel C. Roper, who resigned from the Tariff Board to become Internal Revenue Commissioner.

## THE HUGE TASK OF SUPPLYING DRUGS AND CHEMICALS FOR ARMY AND NAVY

### More Quinine Called for Than was Available in the Whole World—Containers Needed Were Beyond Capacity of Manufacturers to Supply—Proposals Cut to 25 Per Cent of Estimate.

The report of the Committee on Industrial Preparedness which was read at the meeting of the American Drug Manufacturers in New York gave some interesting facts about the Government requirements in chemicals, drugs, etc., for the army and navy. The pharmaceutical and chemical manufacturers were organized in one group, Class I. The report says:

The organization meeting of Class I Manufacturers was attended by the executives of about 150 Pharmaceutical and Medicinal Chemical manufacturing houses summoned from all parts of this country and was probably the largest meeting of such manufacturers, large and small, ever held.

Organization of the class being perfected, a general committee was appointed from which a smaller Executive Committee of five to better carry on the work, was appointed, of which Mr. Ohlinger was made Chairman. This Executive Committee was given full power to act. It was given temporary offices in the Munsey Building, Washington, where it spent a week working day and night, preparing and grouping the lists, making suggestions as to standards, equivalents for drugs no longer obtainable, conforming to trade customs as to size and style of containers, packing, shipping, formulas, etc. After consulting with the members of the General Committee by wire, the action of the Executive Committee was unanimously approved.

The Executive Committee went over the lists of drugs and chemicals supplied by the Army, (including the Veterinary list), and Navy. The requirements for the Navy were small and the lists readily arranged. In the case of the Army the lists called for enough materials for 1,000,000 men for one year and necessarily called for tremendous amounts of some commodities. For instance, there was something like 100,000 pounds of quinine. It was a serious question if there was that amount available in all the world. The list called for 20,000 pounds of phenacetin. This chemical was very high in price at the time and practically out of the market. The Committee suggested acetanilid in its place. On compound cathartics, the list called for 138,000,000 pills. Some of the ingredients entering into the formula were costly and scarce and it seemed unwise to offer such a quantity for manufacture at one time.

It was feared by the Executive Committee that calling for such large amounts of goods at once would be unwise since it would surely greatly affect or even upset the market to such an extent that necessary items could not be promptly supplied. For example, the number of containers needed passed all expectations, the lists of the two supply stations of the Army including the veterinary list required about 40,000 gross, or over 6,000,000 containers, allowance being made for a very moderate breakage. The Committee considered it almost hopeless to get bids on the quantities indicated, particularly because of the large number of containers required. The decision finally was to cut down the amounts to 25%, equivalent to supplies for 250,000 men for 1 year, or for 1,000,000 men for 3 months, and to call for bids for these amounts every three or four months, or at shorter intervals as the army was increased. It recommended that prevailing trade customs, sizes and styles of containers, quantities and doses of the wine and avoirdupois systems be em-

played along with the metric without prejudice to either. This was a very important point in producing large amounts of materials in a short period of time.

There was a disposition on the part of the authorities to have the Executive Committee allot orders and award contracts to manufacturers best in position to produce. The Committee of this Class I, however, decided against such a plan as inadvisable as can readily be seen and as unfair to the trade at large, since it was felt that anyone desiring to do so should have an equal opportunity to bid on this business, and could obtain lists as they were issued by registering his name with the various supply depots of the army and navy.

The authorities also discussed the proposition of manufacturers supplying Army and Navy needs on the basis of cost plus a percentage. Again the Committee differed with those in authority since the matter of cost, particularly in reference to pharmaceutical supplies, would entail a great amount of detail and would be cumbersome and expensive for the Government to send experts to check up the cost of the hundreds of items required. The belief prevailed that the Government would obtain better prices on the basis of competitive bidding since some houses held stocks purchased at low prices and which we believed they were willing from patriotic motives to turn over to the army and navy, on the basis of the prices paid for the raw materials, rather than on prevailing market prices.

Results actually obtained in a practical way now show conclusively that the judgment of the Committee as to the desirability of the system of competitive bidding in this class was correct and wise, since the figures show that the Government actually paid less on the second award of contracts than on the first and while a record of the complete bids to date is not in the hands of the Committee, the tendency has quite uniformly been toward a shading of prices on successive bids.

#### PROBLEMS OF THE U. S. PATENT OFFICE

The Patent Office Society announces that a composite committee has been created, upon request, by the National Research Council, to make a preliminary study of the problems of the U. S. Patent Office and its service to science and the useful arts. This committee, which is expected to meet in Washington shortly, is understood to comprise, at the outset, the following: Leo H. Baekeland, Wm. F. Durand, Thos. Ewing, Frederick P. Fish, Robert A. Millikan, E. J. Prindle, Michael I. Pupin and S. W. Stratton.

The action of the National Research Council in forming a committee of this sort is understood to be in conformity with the wishes of Commissioner of Patents J. T. Newton and Secretary of the Interior F. K. Lane. The special committee of the Patent Office Society urges all interested to forward any patent reform suggestions at once to Dr. Wm. F. Durand, National Research Council, Washington, D. C. It is not expected that patent reform can claim primary consideration during the continuance of the war, but it is felt that the time is ripe for at least a study of conditions.

#### PRICE OF ZINC FIXED

President Wilson has approved an agreement reached by the War Industries Board and the producers of grade "A" zinc, fixing a maximum price of 12 cents per pound f. o. b. East St. Louis, subject to revision on June 1.

A maximum of 14 cents per pound for plate zinc f. o. b. at plants and 15 cents per pound for sheet zinc f. o. b. at plants was fixed, subject to the usual trade discount.

### *Business Brevities*

The Davison Chemical Corporation of Manhattan, has increased its capital from \$750,000 to \$958,335.

Rapeseed to the amount of 14,893 bags and 2,750 cases of rape oil were received at London on January 24.

The plant of the Southern Chemical Products Company of Atlanta was destroyed by an explosion on February 12.

Dr. Isaac Straus, who is said to be connected with a chemical company which manufactures toluol, is detained at Ellis Island.

Copra amounting to 3,277,258 pounds, valued at \$228,055, was invoiced at the American consulate at Trinidad for the United States during 1917.

Divi Divi amounting to 9,468,720 pounds was invoiced at the American Consulate at Curacao for the United States during 1917, compared with 14,144,530 pounds for 1916.

The building containing the offices and laboratory of the Pittman-Moore Company's serum plant near Zionsville, Ind., was destroyed by fire on February 5, with a loss of \$30,000.

Exports of sulphur from the United States in 1916 amounted to 128,755 long tons valued at \$2,505,857, or an increase of approximately 250 per cent. in both quantity and value as compared with 1915.

The War Trade Board has announced that all export licenses issued on and after January 22, 1918, shall be valid for a period of ninety days except in the case of special commodities where a different period is specifically prescribed or allowed.

The Juenalda Graphite Corporation has been incorporated under the laws of Delaware with a capitalization of \$3,000,000. Incorporators: J. F. Berrly Baugh, Birmingham, Ala.; J. Disbrow Baker, J. P. Murray, Philadelphia.

Parke, Davis & Co. stockholders, held the annual meeting on Feb. 5, at Detroit, Mich. The directors elected are: Frank G. Ryan, David C. Whitney, Henry M. Campbell, E. G. Swift, George Hargreaves, Arthur H. Buhl and Charles Stinchfield. Officers re-elected are: President, Frank G. Ryan; vice-presidents, David C. Whitney and Henry M. Campbell; secretary and general manager, E. G. Swift, treasurer, George Hargreaves; assistant-secretary and assistant treasurer, J. E. Bartlett.

The Thomsen Chemical Company of Baltimore, which has petitioned the Circuit Court for dissolution, was originally organized by the founder of the drug firm of J. J. Thomsen's Sons. The factory has been known for years as a branch of the General Chemical Company, Henry F. Baker having been at one time manager, and the present proceeding is the last step to wind up the affairs of the Thomsen Company, which had for its incorporators Philip H. Hoffman, Joel C. Dunbracco, Edmund E. Hoffman, E. Scott Merryman and John C. Westcott. The capital stock was \$150,000. Holders of the bonds were: Alonzo J. Thomsen, \$14,000; J. J. Thomsen, \$12,000; H. J. Thomsen, \$12,000, and J. J. and H. Thomsen, \$12,000.

### PRODUCTION OF LIME IN 1917

#### Output Smaller Than in 1916 Which Was a Record Year—Only Eleven States Out of 42 Making Returns Report Increased Sales—Chemical Demand Larger.

The estimated production of lime made and sold in 1917 in the United States, including Porto Rico and Hawaii, was 3,663,818 short tons, a decrease of 10 per cent. compared with the revised total for the record year, 1916, which was 4,073,433 short tons. It surpassed, however, all records, previous to 1916. This estimate is based on returns made by the principal producers to G. F. Loughlin, of the United States Geological Survey, Department of the Interior.

Of the 42 producing States, only 11 reported increased sales. Virginia and Indiana were the only States in the group having sales of more than 100,000 tons to show increase, which amounted to 1 per cent. and 3 per cent., respectively. Other States of this group showed decreases ranging from 5 per cent. (Pennsylvania) to 36 per cent. (Wisconsin). Vermont, with an output of 53,143 tons, showed an increase of 23 per cent.

The following table shows the estimated output of all States that marketed more than 50,000 short tons:

State	Total Lime		Hydrated Lime	
	Tons	Per cent change	Tons	Per cent change
Pennsylvania .....	921,995	- 5	151,253	+ 16
Ohio .....	511,687	-10	332,475	- 5.5
Virginia .....	329,368	+ 1	(a)	- 5.6
West Virginia .....	242,643	-10	41,390	-14
Missouri .....	126,024	- 7	28,684	- 17
Wisconsin .....	171,944	-36	12,800	- 25
Massachusetts .....	132,644	-16	24,265	- 24
Maryland .....	128,114	-12	(a)	-35
Indiana .....	124,788	+ 3	23,993	+ 5.7
Maine .....	115,297	-33	(a)	-11
New York .....	105,728	-10	8,736	-20
Tennessee .....	100,370	- 8	15,330	+ 4.7
Michigan .....	73,432	-15	(a)	+ 20
Alabama .....	65,971	- 2	7,186	+ 6
Connecticut .....	65,327	-23	(a)	-41
Illinois .....	63,476	-20	(a)	-11.8
Vermont .....	53,143	+23	(a)	-141.5
California .....	51,697	- 9	(a)	+ 9.6
Texas .....	51,275	- 5	14,416	- 1
Other States .....	168,895	.....	39,229	.....
	3,663,818	-10	719,757	+ 1.3

a Included in "Other States."

The estimated sales of hydrated lime in 1917 amounted to 719,757 short tons, a slight gain (2,375 tons, or 0.3 per cent.) over the sales shown by the revised figures for 1916. This difference is so small that the final figures may not show a gain. This is the first year since statistics of hydrated lime have been collected by the Survey in which there has been no substantial gain in its production. The fact that hydrated lime held its own, however, during a year in which the decrease in the production of lime was so general indicates a relative increase in its use. No companies reporting sales of hydrated lime in 1916 failed to report sales in 1917, and 2 new hydrating plants reported production, one in Arkansas and one in Idaho. The largest percentages of decrease in the production of hydrated lime shown in the foregoing table were made in States whose product is used largely for building.

The prices of lime, which generally increased in 1916, continued to rise throughout the country in 1917, though not in proportion to the continued increase in cost of production. A few companies in widely separated parts of the country were obliged to close their plants, partly on account of excessive costs but particularly because of shortage in fuel and labor. These conditions and a shortage of railway cars caused decreased

production even where the demand for lime was reported good.

The building-lime trade declined in all parts of the country. The unprecedented demand for building lime in 1916 continued until February, 1917, when the effects of the war augmented in some northern districts by severe weather, brought it to a close. A fair to good demand continued in many districts, however, through the spring, and then a general decline in building set in. This decline was due to the uncertainties of war, to increased shortage of labor, fuel and cars, and to the fact that, lime being perishable, the trade would not order large car lots as demanded by the railroads.

The demand for lime by chemical and metallurgical plants surpassed that of the previous record year, 1916, and the demand by paper mills and tanneries apparently also appeared good. The sales of agricultural lime increased in some districts, and decreased in others, owing mainly to the difficulties attending manufacture and to shortage of farm labor.

### SULPHURIC ACID SUIT UP AGAIN

The litigation between the Baugh Chemical Company, manufacturers of fertilizers, and the Davison Chemical Company, producers of sulphuric acid, both of Baltimore, over the failure of the Davison Company to supply the Baugh Company with a stipulated quantity of acid under its contract, which has been figuring in the courts of that city for nearly a year at intervals, ran into another chapter on February 11, when the case of the Baugh Company for \$500,000 damages came up for its second trial, this time before Judge Dawkins in the Superior Court.

The first trial resulted in a disagreement of the jury, none of the members of which were willing to award the Baugh Company more than \$20,000 or \$25,000, while some held out for nothing at all. The Baugh Company claims that it was damaged in this amount by reason of the Davison Company's failure to deliver a specified quantity of acid between May, 1915 and June, 1916.

The Davison Company has been contending in its defense that the war brought shipping to a halt and prevented the importation of Spanish pyrites, from which the acid to be furnished under its contract with the Baugh Company was to be made, and that it was not legally bound to furnish brimstone acid, which cost very much more to produce, while the Baugh Company holds that the contract specified acid, and that it made no difference whether the acid was made of brimstone or pyrites. A formidable array of counsel is appearing on either side.

### UNITED STATES IMPORTS OF TIN

Imports of tin into the United States during the calendar year 1917 showed a slight increase, notwithstanding the difficulties experienced by American importers in getting foreign export licenses and the fact that the importation of this metal is controlled by our own Government.

Including the approximate content of imported ore, but not including Alaskan ore, the total imports of tin in 1917 amounted to 69,996 long tons, against 66,624 tons in 1916, according to the Bureau of Foreign and Domestic Commerce, Department of Commerce.

Of our 1917 imports, 49,415 tons, or 74 per cent. of the total, came from England and the Straits Settlements, whereas in 1917 only 41,463 tons, or 60 per cent. came from these two sources. Imports from the Dutch East Indies increased to 14,148 tons, or 20 per cent. of the total, Australia, China and Bolivia supplying most of the remaining 20 per cent. A large part of our Straits tin imports came by way of England, as usual, but it was expected that the present year will witness an increase in direct shipments.



## The Foreign Markets

### LONDON MARKET TENDING UPWARD

#### Arrivals of American Specialties Fail to Lower Prices—Control of American Exports and Imports Causes Uncertainty Regarding Future Deliveries

(Special Cable to Drug and Chemical Markets)

LONDON, Feb. 20—There have been some arrivals of American manufactured drugs and chemicals during the week, but in such small quantities that rates continue firm and in some cases further advances have occurred. Owing to the general scarcity of products the market is fairly active. The upset conditions in shipping and the announcement that the American Government had taken control of imports and exports have caused much uneasiness in drug circles. It is believed that the uncertainty regarding future shipments will make an unsettled and higher drug market for some time.

American specialties are all firmer. Supplies of acetanilid, hexamine, and the benzoates are practically sold out.

There is a higher market on arrowroot, balsam tolu, cocoa butter, cream of tartar, platinum and Jamaica sarsaparilla.

Cape aloes, oil of bergamot and Japan wax are easier.

Advices by mail from London give the following prices on products in large lots:

Saltpetre—One of the English makers announces that the firm have completed the extension of plant, and are in a position to supply saltpetre in reasonable quantities up to March 31, 1918. Their prices are: Crystals or granulated in 1-cwt. bags, 62s per cwt., crystals or granulated in 2-cwt. bags, 61s 6d; powdered in 1-cwt. bags, 64s; powdered in 2-cwt. bags, 63s 6d per cwt. for orders or contracts of two tons.

Acetanilid is rather firmer, and some parcels have changed hands at from 4s 6d to 4s 9d per pound net, but there is not much available at these prices.

Agar-agar—Sales to come forward have been made at 2s 4½d c. i. f., and on the spot 3s is quoted for No. 1 strip.

Canary seed is in good demand at advancing prices; early in the week fair to good Morocco sold at 132s to 135s, but since then higher prices are quoted.

Cannabis Indica—Small sales of genuine Bombay tops have been made at 20s per pound net, and the last business in Africa was at 3s.

Chloral Hydrate is firm at 9s 6d to 10s per pound net in bond to come forward.

Codeine—Applications for licenses to export codeine and its salts (and all other opium alkaloids) to Japan must now be accompanied with certificates from the Japanese Home Office, similar to those in vogue for morphine and cocaine.

Menthol is very flat and easier, with spot sellers at 13s per pound. Fair sized quantities have arrived.

One hundred cases of opium were received in Liverpool during the period from Jan. 14 to Jan. 19.

Exports of aloes from the Union of South Africa during October amounted to 289,106 pounds, making a total for ten months of 700,543 pounds, against 852,062 for the same time in 1916.

### British Dye Situation

In regard to the claim of London merchants engaged in the textile trade that they had secured 257 secret "recipes" for the manufacture of aniline dyes, which had been used in German factories, the British Board of Trade is reported to have said that as yet it had no opportunity to test the merits of the claim. It was pointed out that the Badische Co. is only one of several German companies engaged in the manufacture of dyes. One of the latest catalogues gives exactly 1,001 dyes, each representing a distinct color, while the modifications—the finer shades of similar colors—run at least to 2,000 or 3,000. Different firms offer similar things under varying names, so that 257 recipes—a term which is not in accordance with the technology of the trade—must not be taken to represent the whole of the German dye industry.

Prof. Arthur G. Perkin, head of the dyeing department in the University of Leeds, is reported in the *Yorkshire Post* to have said that he reserved judgment until a statement on the subject was forthcoming from an English expert of standing. He said there was much misapprehension in the public mind as regards color manufacture, and a very general idea that the whole thing depended upon secret processes. There was, however, a very large range of dyes in the actual formation of which no essential difficulty occurred, and the recipes for the manufacture of these would not be of very special value.

The reason why these had not been made previously in this country was not a lack of knowledge as to the formation of the dye itself, but a lack of experience in the economical preparation of the more or less intermediate materials from which the dyes were prepared, and unless, therefore, the recipes in question included a knowledge of these facts, they would not be of much benefit to Great Britain.

In the annual report of Levinstein, Ltd., it is declared that larger plants are needed before British manufacturers of dyes can supply the textile industries adequately. The Government is urged to give the necessary financial assistance and special priority for the erection of plant. Speaking of the steps already taken by the British Government, Levinstein, Ltd., says the amalgamation and pooling of resources, research and knowledge, originally proposed, has so far not been achieved. The investment of £2,000,000 in British Dyes (Ltd.) has not solved the problem of obtaining adequate supplies of British-made dyes.

Some 15 months ago a joint committee of the dye makers and dye users drew up a list of the essential dyes—said to be 400 in number—that are required for the maintenance of the British textile trades, but no organized effort of a national character in the way of facilities for obtaining steel and other structural material for plant, raw material for the dyes, labor and capital, has yet been made in the United Kingdom up to the present time.

The directors of the British War Trade Department has issued notice that licenses for future exports to America of shellac and lacs of all kinds will be drawn for consignment only to the United States Shellac Importers' Association, Inc., New York.

## How Zinc Dust Is Made

Zinc dust is a heavy, bluish-grey powder consisting chiefly of metallic zinc. It comes on the market in various degrees of fineness and purity.

The first zinc dust of commerce was obtained as a by-product in the production of spelter from zinc ores. The condensers in which the molten zinc is collected are provided with sheet iron "prolongs" in which the very finely divided metallic fume which escapes condensation in the condenser proper is collected. The zinc dust (or blue powder, as it is commonly known), is of varying degrees of purity, the metallic zinc content running as low as 80 per cent. It will be seen from the crude method of manufacture that other impurities besides zinc oxide are carried over in considerable amount. Cadmium, arsenic, lead and particles of ore and coal are to be found in this product. This blue powder is prepared for the market by screening the "prolong" collection through the proper sized mesh. This material was imported in large quantities from the zinc smelters in Germany and in Belgium, and is also manufactured in the United States.

A decided improvement in the manufacture of zinc dust was made in this country by Messrs. G. C. Converse and A. B. DeSaulles, who patented the process known by their names. In this process zinc dust is made from pure spelter and the impurities which appear in the ordinary blue powder of commerce are practically eliminated. The spelter is boiled and the zinc vapor is condensed in the form of an exceedingly fine uniform metallic fume. This operation is conducted in an atmosphere free from air and the percentage of zinc oxide is much decreased, so that the product of the Converse-DeSaulles process contains from 92 to 94 per cent. of metallic zinc.

The fume product obtained in this process can be readily distinguished from any other zinc dust by its exceedingly minute and uniform particles. These particles are so fine that no screens can be constructed to determine the actual particle size. Examination and comparison of this material with other zinc dusts under a microscope is the only method which will show the extreme division of the fume product made by the Converse-DeSaulles method. Size is of great importance in securing a proper reaction in the dye industry.

A recent development of the art is the production of zinc dusts containing from 96 to 98 per cent. metallic zinc. These dusts are made by breaking up molten spelter into finely divided particles by means of an inert gas under pressure. This dust apparently possesses advantages for certain specific trades; for example, in the art of producing metallic zinc coatings on other metals such as the Sherardizing and Schoop process. Up to the present time, however, no dusts produced in this manner have approached the degree of fineness and uniformity obtained in the Converse-DeSaulles method and consequently their application is somewhat limited.

The method of determining the metallic zinc content in zinc dust is one which should be standardized. Methods have been employed in the past by unscrupulous dealers which give high results for the metallic zinc content, the error being as high as 5 per cent. The method of analysis now in use by the leading producers and consumers depends upon the evolution and measurement of the hydrogen generated when a sample of the zinc dust is treated with dilute sulphuric acid. Where specifications are in use great care should be employed in checking up this question of analysis.

Previous to the European War the United States obtained practically all of its zinc dust from Germany and Belgium, by reason of the cheapness of labor in those countries and the lack of sufficient protection for the

product made in the United States. The following table shows the amounts imported:

1910.....	1493 net tons
1911.....	1713 " "
1912.....	2736 " "
1913.....	2368 " "
1914.....	2004 " "
1915.....	707 " "
1916.....	934 " "

In 1913 two smelters were engaged in the manufacture of zinc dust in this country. When war conditions cut off America's foreign supply, several more smelters took up the production on a large scale, and today American needs are being taken care of by American producers.

The following table gives the output of zinc dust in this country since 1910:

1910.....	69 net tons
1911.....	254 " "
1912.....	492 " "
1913.....	423 " "
1914.....	1004 " "
1915.....	1755 " "
1916.....	2318 " "
1917.....	7000 " " *

\*Estimated.

This production is by no means the result of simply eliminating importations, but is largely due to the tremendous growth of the dye industry in the United States. The steadily increasing production indicates that it will no longer be necessary to import zinc dust, and if proper protection is given to the American industry, exports will probably take place when the world returns to normal times, in view of the superior quality of the American product.

Zinc dust is used in the dye industry for its reducing properties, both in acid and alkaline solution. It is also used in the precipitating of gold in the cyaniding industry. The Sherardizing process of galvanizing has assumed considerable importance in this country, and is using a comparatively large tonnage for the finest kind of galvanizing work, where machine parts have to be given a protective coating and still maintain their fit. It finds considerable application in the manufacture of anti-corrosive marine paints, and in the purification of zinc liquors from lead and cadmium in the production of pure solutions for the manufacture of lithopone and electrolytic zinc.

### CAPITOL CHEMICAL CO. IN BANKRUPTCY

The Capitol Chemical Company of 2 Rector Street, New York, has gone into bankruptcy. The liabilities amount to \$103,882 in unsecured claims. The company has no assets. Voluntary petitions have been filed individually and as partners by Jacob F. Reichard and John Reston, doing business under the firm name of the Capitol Chemical Company. The company's creditors are only four in number, chief among whom is Bush, Beach & Gent, Inc., of New York, to the extent of \$86,958.

The Secretary of Agriculture of Pennsylvania has announced that all nitrate of soda sent to the farmers of Pennsylvania by the Federal Government will be exempted from the requirements of the State fertilizer law and that farmers will not be required to pay the fertilizer brand fee.

E. A. Bromund & Co., dealers in wax, have removed their offices from No. 356 West Broadway, New York, to larger quarters at No. 258 Broadway.

## Trade Notes & Personals

S. T. Atkinson, druggist, of Saskatoon, Sask., is discontinuing business.

The drug store of J. J. Duncan, at Pottersburg, near London, Ont., was destroyed by fire on Feb. 5.

G. A. Wilte carrying on business as the Wilte Drug Co., Port Arthur, Ont., has assigned to Arthur W. Thompson.

Bourque & Lippens, druggists, and Dr. J. O. Lambert & Co., manufacturers of patent medicines are registered at Montreal.

The increase in capital stock of the Garfield Chemical and Manufacturing Corp., New York, from \$500,000 to \$1,000,000, has been certified.

An explosion at the plant of the Beaver Chemical Co., Andover, Mass., last week is estimated to have caused damage to the extent of \$100,000.

The store of the Dunlop Drug Co., owned by W. S. Dunlop, on the northwest corner of Main St. and McDermot Ave., Winnipeg, Man., was destroyed by fire on February 1, with a loss of \$30,000, mainly covered by insurance.

The Canadian Remedy Co., Ltd., has been incorporated with head office at Toronto, Ont., and an authorized capital of \$30,000 to manufacture and deal in drugs, chemicals and medical compounds. Alonzo B. McClure, Abram G. McNight and Robert J. Alexander are provisional directors.

The Treasury Department has ruled that although the importation of distilled spirits for beverage purposes is prohibited, the acts of Aug. 10 and Oct. 3, 1917, will not operate against the importation of medicinal preparations, including tinctures and elixirs, dentifrices, and similar compounds, nor against bay rum and similar toilet preparations used in the arts and trades, such as varnishes, shellacs, and similar preparations.

Germany sold to the United States before she plunged the world into war \$250,000,000 worth of chemicals every year and less than 4 per cent. of this represented labor cost. By the time the war is over Germany will have lost this immensely valuable special commerce according to Prof. D. D. Jackson of the chemical engineering department of Columbia University because the chemists of America spurred by necessity have learned to do what the Germans accomplished.

Orders have been issued lifting the freight embargo as to drugs and medicines previously imposed on the lines of the Pennsylvania, Baltimore & Ohio, and Philadelphia & Reading Railroads. In the case of certain agents, however, misunderstandings arose because of the fact that the embargo was originally laid in an official written communication from Washington, while the orders exempting drugs and medicines came by telegraph or telephone from New York. In the event that members of the trade encounter any difficulty in having their shipments accepted they should at once take the matter up by telegraph with A. H. Smith, New York Central Terminal, New York City.

## Profits In Quinine

The Bandoeng factory in Java which has a contract with the cinchona planters for their output of bark from which quinine is made, are seeking to renew the agreement which lapses in July next. The Bandoeng factory paid a dividend of 93 per cent. last year, and the shareholders are naturally reluctant to lose the monopoly privileges which they have enjoyed.

It is proposed that stronger control over shipments of bark shall be enforced. The planters have had a prosperous year. They sold all their cinchona, including the accumulations of past years.

The Bandoeng factory's report states that during 1916 about 145,000 kilos of quinine was received as bark and of this, at the end of the year, 45,000 kilos remained unworked. Working costs were nearly doubled, but work was carried on night and day. The stock of quinine at the beginning of 1916 was valued at 291,795 florins (florin is a trifle over 40 cents). The amount of quinine produced during the year was valued at 2,907,444 florins, and that unsold on December 31, 1916, was held at 563,399 florins. Sales realized 4,653,196 florins, giving a net profit of 1,869,597 florins compared with a profit of 837,313 florins in 1915.

## METAL AND CHEMICAL COMPANIES UNITE

A consolidation of the Goldschmidt Detinning Company and the Goldschmidt Thermit Company has been effected, the new corporation being known as the Metal and Thermit Corporation. The capital of the new company is \$3,250,000. The companies which were merged have been working practically jointly for the past two years and it is expected greater efficiency will be attained by the combination.

The Metal and Thermit Corporation operates four plants, located in Jersey City, Chrome, N. J., Wyandotte, Mich., and East Chicago, Ind. The Chrome and East Chicago plants are devoted to the detinning business, the Wyandotte plant to the production of liquid chlorine and the Jersey City plant to the thermit products manufacturing.

Daniel G. Reid has just been elected a director of the new corporation, of which W. T. Graham is president.

## TIN PRICES AGAIN ADVANCED

Straits tin was quoted in London, last week at £310, an advance of £4 10s within a few days, for Singapore shipment. Straits spot tin was sent up £5 10s in the same time. Standard spot also advanced £5. The cause of the upward turn is here attributed to the sinking of the steamer Glencarthy, from Singapore to London, with 1,000 tons. It is unusual for steamers to carry so much tin, and the loss must be severely felt. In the New York market sellers of Banka are now asking 75c for February shipment. Chinese has also gone up to 66c for February shipment and 64½c for March. No Straits were offered, and the spot market is bare.

The Great Western Electrochemical Company, of California, which manufactures bleaching powder, caustic soda, and products for match making, water purification, sanitation and fire extinguishing, has introduced a profit sharing system for its employees. The company was incorporated in January a year ago with Mortimer Fleishacker, president; John F. Bush, vice-president and general manager; Arthur G. Lilienthal, secretary and treasurer, and C. W. Schedler, factory superintendent. Operations at the factory were started last July.



## Iodine Needed for Wounded

The advance made in the price of iodine by the Chilian Iodine Syndicate continues to be the subject of editorial comment in the British press. In a recent issue of the *Chemical Trade Journal* of London said:

"On several occasions since the beginning of the war we have referred to the outrageously high prices charged by the nitrate producer for the by-product iodine, used in enormous quantities in the treatment of the wounded. In our issue of Feb. 17, 1917, under the heading 'A Sop to Cerberus,' we referred to the reduction of the official selling price from 10½d to 8½d per ounce, but we recently announced its restoration to the higher figure, and once more we feel called upon to protest against the imposition.

"For obvious reasons the profits made on the commodity are never shown separately in the accounts of the nitrate companies, but that they are beyond the dreams of avarice may readily be inferred from the fact that until lately stocks of iodine in Europe were valued at about 1½d per ounce.

"The output is strictly controlled and pooled under the iodine combination in existence for more than twenty years and with the production of nitrate on the present scale it could easily be doubled and sold at half the current price at a handsome profit."

## NEW PROCESS FOR MAKING PHENACETIN

It is reported from Iowa City that Prof. W. A. Konantz, a research chemist in the college of pharmacy at the state university, has discovered a method by which phenacetin, a drug which became almost unobtainable with the break with Germany, can be produced at less than one-half its present cost. Prof. Konantz says his process yields a pure product which meets all requirements for medicinal use.

When trade with Germany ceased, the price rose to \$40 a pound and even at that price, it was almost impossible to obtain it because of the limited supply. Domestic production has lowered this figure considerably, but American manufacturers have been unable to make the drug economically. The price now is nearly ten times as great as it was before the war.

## CALIFORNIA CHEMICAL NOTES

The Western Calcium Chloride Syndicate, of Los Angeles, has equipped a plant for the manufacture of calcium chloride.

Ventural Refining Company has erected a wax extraction plant at Fillmore, Cal. Wax will be extracted from lubricating stock and handled as a by-product.

The California-Burdett Oxygen Company has added extensive additions to its plant at Vernon, Cal. The ship-building industry is consuming large quantities of oxyacetylene gas.

The Stauffer Chemical Company, of Los Angeles, is erecting a one hundred thousand dollar plant on a fifteen-acre tract. Hydrochloric acid will be the principal product manufactured.

At San Diego the Lower California Chemical Company is making orcein dyes, using as raw material the orchilla, a moss found growing in vast quantities along the western coast of lower California.

## Foreign Trade Opportunities

The Department of Commerce, Washington, D. C., has received the following inquiries for drugs, chemicals and accessories. Reserved addresses may be obtained from the Bureau and its district and cooperative offices. Request for each opportunity should be on a separate sheet and state opportunity number. The Bureau does not furnish credit ratings or assume responsibility as to the standing of foreign inquirers; the usual precautions should be taken in all cases.

26439—An agency is desired by a man in France for the sale of chemical fertilizer, superphosphates, and fungicides for the vineyards. Payment will be made by cash on delivery of goods at Bordeaux. Correspondence should be in French.

26440—A company in England wishes to purchase commercial or technical tannic acid in tins of 5 pounds net, each case to contain 10 tins; 1,000 pounds is desired for first shipment. The company wishes to get in touch with manufacturers only. Quotations may be made f. o. b. New York. Payment will be made in New York on three days' bill on London, with documents attached. Reference.

26441—An agency is desired by a man in France for the sale of chemical products, metallic ores, and heavy metals. Correspondence may be in English. Reference.

26451—A company in Canada desires to secure an agency for the sale of chemicals, hog stomach linings, calves stomachs, edible colors, tallow, greases, and bones. Quotations may be made f. o. b. point of shipment. Correspondence may be in English. Reference.

26452—A man in France desires to purchase or secure an agency for the sale of nitrate of soda, nitrate of potassium, superphosphates, dried blood, sulphate of copper, verdigris, tartaric acid, and citric acid. In case of purchase cash will be paid. If agency is granted, security will be given. Correspondence should be in French. Reference.

## New Incorporations

Seminole Chemical Co., Manhattan, capital \$100,000. M. Suesskind, L. and I. J. Joseph, 1421 Madison Ave.

Henry L. Hughes Co., Troy, N. Y., capital \$250,000. Formed by consolidation of the Universal Brush Co., and Henry L. Hughes. Brushes and toilet articles. H. Alexander, H. J. Benedict, R. H. Goldman, 413 West 147th Street, New York City.

The Import Drug Specialties Company, Cleveland, Ohio, capital \$100,000. A. E. Bernstein, M. Gussman, Irene Nungesser, M. L. Bernstein, Harry F. Glick.

Quenelda Graphite Corp., Dover, Del., capital \$3,000,000. J. F. Berly Baugh, Birmingham, Ala., J. Disbrow Baker and J. P. Murray, of Philadelphia, Pa.

The Benson Drug Company, Greenville, Ga., capital \$10,000. J. P. Benson, S. A. Moore.

Martin-Bell Drug Company, Woodward, Texas, capital \$25,000. C. M. Bell, C. H. Martin and B. R. Thomas.

William M. Simpson Drug Company, Wilkinsburg, Pa., capital \$30,000. C. P. Rhen, C. M. Johnston, both of Wilkinsburg, Pa.

Taliaferro Drug Company, Peoria, Ill., capital \$6,000. Delbert A. Covey, Ira J. Taliaferro, W. N. Brown.

National Drug Company, Pittsburg, Pa., capital \$1,000,000. Wholesale and retail drug stores. Leonard L. Westtlen, J. E. Welland, Raymond E. Hess, Pittsburg, Pa.

Jeriko Chemical Company, Wilmington, Del., capital \$300,000. To manufacture chemicals and drugs. C. L. Rimlinger, M. M. Clancy, F. A. Armstrong, all of Wilmington, Del.

Cole Chemical Company, St. Louis, Mo., capital \$300,000. To deal in and with chemicals, drugs, etc., B. L. Cole, Ada L. Laidan, St. Louis, Mo., and Ferris Giles, of Wilmington, Del.

**Capital Increases**—Anthony-Hammond Chemical Works, Manhattan. From \$100,000 to \$250,000.

W. and S. Job & Co., Manhattan. From \$100,000 to \$300,000.

Davison Chemical Corp., Manhattan. From \$750,000 to \$958,333 and number of shares from 150,000 to 191,667.

**Change of Name**—Dicks, David & Broadfoot, New Jersey, to Dicks-David Co., Inc.

## EMBARGO ON SODIUM HYPOSULPHITE

The embargo against sodium hyposulphite, imposed by the French Government, has been renewed according to a cable from the American Consul General at Paris who says:

"A ministerial decree of February 5 revokes the provisions of a former decree which permitted the exportation or re-exportation of sodium hyposulphite destined for the United Kingdom, British dominions, protectorates, or colonies, Belgium, Japan, Russia and the United States."

## Color & Dyestuff Markets

### IMPORT RESTRICTIONS ADVANCE PRICES

#### **Holders of Spot Goods Expect Increased Demand— Difficulty in Obtaining Supplies Likely to Cause Scarcity in Dye Bases and Dyewoods**

The New York market on colors and dyestuffs has been firm and the volume of actual trading showed an increase over the quantities of stocks that changed hands the previous week. Price changes have been upward. While several elements have entered into the situation the outstanding feature was the unsettled condition brought about by the recent rulings from Washington regarding imports and exports. The various items in the list which have been imported into this country are not in heavy supply and holders of spot material have taken advantage of the situation.

The dye bases and dyewoods used in America are imported, and in the majority of instances dealers are asking higher prices all along the line. Albumen is in strong demand, but because importers cannot get stocks here from primary points rapidly enough to take care of the consumer call, few additional orders are being booked. The same is the case with cutch, indigo, cochineal and other dye bases and dyewoods are in good inquiry and few important sellers are inclined to lower prices to any extent.

Of the five important coal-tar crudes, benzol is about the only one that is offered freely on the spot. Naphthalene is scarce on spot at Eastern points, and prices continue to advance. Phenol is practically out of the spot market as well as toluol and prices heard are entirely nominal for stocks in small quantities. The Government is keeping a sharp watch on the available supplies of the last two materials and where sales have been made, they have been subject to seizure. In contrast, it is interesting to note the weakness of benzol. One important factor stated that there was at least half a million gallons of this material available in America with few buyers in sight, and even with such a condition, it is difficult to establish a real market level and holders do not hesitate to advise that much shading would be possible on firm bids.

All the intermediates have been in steady demand. Benzozate of soda is still the outstanding feature. Prices continue to advance because of light supplies and a heavy demand. Aniline oil follows as a close second, and in some quarters higher prices are heard than those that prevailed a week ago. It appears that the bulk of the spot quantity of xylol is in the hand of speculators and for this reason wide price ranges are heard, with supplies light and a good demand. Diphenylamine, dinitrotoluol, dimethylaniline, para-amidophenol, para and ortho toluidine are quoted firmly on spot. In the main, all of the coal-tar colors are moving in steady volume, with few important price changes noted.

#### Dye Bases and Dyewoods

**Albumen**—Because spot supplies are light, and the majority of importers are already behind in their orders, prices named in the local market for all grades of albumen show another advance with the general condition nominal. For the Chinese egg albumen nominal quotations range from \$1.05 to \$1.10 a pound; for the imported blood from 65c to 70c a pound, and for the domestic blood from 55c to 60c a pound.

**Cochineal**—Prices are firm on all grades of cochineal at 54c to 56c a pound for the silver 53½c to 54½c a pound for the gray black and from 55c to 59c a pound for the rosy black, according to quantity. The demand has been steady but not particularly large. The undertone of the market remains firm. Supplies are not abundant.

**Cutch**—The spot market is firm on all grades of cutch. A good demand is reported and because the quantity of spot material is not large, there is every reason to believe that the market will remain steady for some time. All stocks were held in firm hands at 18c to 20c a pound for the Rangoon in boxes; 16c to 17½c a pound for stocks in bales; 9½c to 10c a pound for the liquid and 11½c to 13c a pound for the tablets.

**Divi Divi**—The situation is unchanged. The inquiry is holding up well, but the demand for spot and nearby stocks is not heavy and in some quarters holders have lowered their price slightly with \$64.00 a ton heard as the inside figure. In most directions, however, holders are asking \$65.00 to \$70.00 a ton, according to quantity. On stocks for shipments, prices continue to range from \$63.00 to \$64.00. Arrivals here have not been large, but it is said that considerable material is afloat from primary points.

**Fustic**—Prices are unchanged and sellers were quoting with considerable firmness at the close at 25c@26c a pound for the solid, according to quantity; 4½c@5c a pound for the chips, and from \$45 to \$50 a ton for the sticks. The consumer demand for most all grades of fustic appears to be improving with spot stocks in comparatively light quantity.

**Gambier**—For the common gambier sellers were quoting with additional firmness at the close at 21c@21½c a pound; 10c@11c a pound for the 25 per cent. tan; 23½c@25c a pound for cubes No. 1 and 21c to 22c a pound for cubes No. 2. All gambier is in strong demand and the cube material is particularly hard to locate. Arrivals here continue comparatively light from primary points.

**Indigo**—The market has been quiet because little spot material is offered in the open market. Prices named in most quarters were 30c@32c a pound for the wool, and 50c to 54c a pound for the cotton.

**Logwood**—No important price changes have been recorded. There is a good inquiry, but the demand for spot material is not heavy. For the Mexican and Hayti sticks prices have ranged from \$36 to \$40 a ton, according to quantity, and the chips have been quoted in some quarters at 2½c@3c a pound. Supplies here are not large, but it is understood that stocks are rolling and afloat toward New York.

#### Coal-Tar Crudes

**Benzol**—Conditions in the New York benzol market remain about the same. Those in close touch with the situation say supplies are abundant with no apparent buying interest for spot material, and with inquiries comparatively nil the undertone is weaker. Only a few contracts are being made over the next few months, but it is only occasionally that any large contracts are heard for over the year. Large quantities, 20,000 to 40,000 gallons, both on spot and contract, are offered in the local market at 35c to 36c a gallon, while small quantities are selling at 37c a gallon, and upwards.

**Naphthalene**—Offerings of a good grade of flake naphthalene are unusually light. The demand is heavy and those who have spot material are asking high prices with 11c a pound prevailing as the inside price and 12½c a pound as the maximum. Because of these high prices most consumers are operating in a restricted manner. It was learned at the close that stocks rolling Eastward were quoted at 10¼c to 10¾c a pound.

**Phenol**—A number of inquiries have been recorded for large quantities of phenol either on spot or nearby, but there appears to be very little available. It is said that exporters whose stocks were seized some time ago have succeeded through negotiations with the Government in securing offerings of settlement as high as 46c a pound, but as 52c was originally paid for the material those who lost by seizure are endeavoring to secure a more favorable settlement. Where figures were obtainable on small lots of spot and nearby phenol from 55c to 57c a pound was the price named.

**Toluol**—Only a few offerings of small quantities of toluol have been made, but the Government is keeping a careful watch on the situation and no large transactions have been recorded. Authorities from Washington continue to seize stocks and prices heard are nominal. Where figures were obtainable \$5.75 to \$6.00 a gallon have been named and it is only where a user is hard pinched, that he will pay this price.

**Xylol**—Considerable speculation is noticed on every hand in xylol which probably accounts for the wide price ranges. There is a steady consumer demand. Quotations for spot and nearby stocks are 35c to 50c a pound. So far as could be learned supplies are not abundant but in sufficient quantity to take care of the present volume of business. The inquiry is strong.

**Acid, Naphthionic**—The general condition is unaltered. The demand is steady and prices are \$1.10 to \$1.20 a pound for the crude, and \$1.40 to \$1.60 a pound for the refined. Supplies continue comparatively heavy.

**Acid, Sulphanilic**—In the main the condition on sulphanilic acid has been steady with prices unchanged. The inquiry is strong but the demand for spot material is not particularly heavy. The supply on hand is not large but all orders have been filled promptly. Closing prices were 32c to 34c a pound for the crude on spot and over the month, with figures for the refined ranging from 42c to 44c a pound, according to quantity.

**Aniline Oil and Salts**—Buying continues heavy on both the oil and the salts. Prices at the close were 27c to 28c a pound, drums extra, for the latter material, and 33c to 35c a pound for the salts. Spot stocks are becoming scarce.

**Benzoate of Soda**—The general situation has been quiet during the week as there have been few offerings of spot material. Because users have been unable to locate large quantities of benzoate of soda at lower prices than are now prevailing the inquiry has fallen off concerning forward positions. It has been rumored in the market that shorts are circulating fictitious offers at low figures, but upon firm orders the usual reasons are generally given for not being able to produce. The trading level for the soda was regarded as \$5.00 to \$5.50 a pound at the close with the price of the acid in the neighborhood of \$5.50 to \$6.00 a pound, according to quantity.

**Benzaldehyde**—The consumer demand is light and while some are unable to offer because of the present toluol situation, it is said there is plenty of material available. For the free from chlorine grade \$4.50 to \$5.50 a pound is quoted, while material with a trace of chlorine is quoted at \$2.50 to \$3.00 a pound, and with the chlorine content at \$2.40 to \$2.50 a pound.

**Dimethylaniline**—There are few dealers offering this material at the present time, and some producers are quoting only on contract with prices ranging from 62c to 65c a pound, some asking as high as 70c a pound. At the close there were several lots of spot dimethylaniline available at 65c a pound, subject to prior sale.

**Dinitrotoluol**—The local market continues in an unusually tight condition. The demand is many times in excess of the production. This material is now going into khaki colors, and where prices are heard they range in the neighborhood of 60c a pound.

**Diphenylamine**—Very little spot material is available, as the explosive manufacturers require large quantities. Quotations for spot and nearby stocks are nominal at 90c to \$1.00 a pound, with some asking as high as \$1.05 a pound.

**Para-Amidophenol**—There have been rumors of large buying orders which have caused a slight advance in prices. Spot and nearby base was quoted firmly at the close at \$4.00 a pound as the inside and \$4.50 a pound as the maximum. The hydrochloride material is quoted at \$4.60 and \$5.00 a pound, depending on quantity. Despite the apparent firmer condition, dealers are of the opinion that the above prices could be shaded on firm bids.

#### NATIONAL ANILINE ELECTS DIRECTORS

The National Aniline and Chemical Co., New York, held its annual meeting on Monday, Feb. 18, at the offices 244 Madison avenue. Stockholders voted to increase the number of directors and the following named were added to the Board: L. C. Jones, Clinton S. Lutkins, R. C. Taggesell and Orlando F. Weber. The other directors re-elected are J. F. Schoellkopf, J. F. Schoellkopf, Jr., C. P. Hugo Schoellkopf, of the Schoellkopf Aniline & Chemical Works, Inc.; W. Beckers, Eugene Meyer, Jr., Charles J. Thurnauer, of the W. Beckers Aniline and Chemical Works, Inc.; I. F. Stone, of the National Aniline and Chemical Co.; Henry Wigglesworth, J. M. Goetchius, of the General Chemical Company and the Benzol Products Co.; T. M. Rianhard, W. H. McIlravy, of the Barrett Company; H. H. S. Handy, E. L. Pierce, of the Semet-Solvay Company.

The United Drug Company of Boston, has declared the regular quarterly dividend of 1¼ per cent. on the common stock.

Exports of indigo from Calcutta to the United States for the year ended March 31, 1917, amounted to 5,033 cwt., against 4,931 cwt. in the previous year.

The British Government has prohibited exports of gum tragacanth to all destinations, according to a cablegram from the American consulate at London, dated February 9.

Republic Oil and Sulphur Company has been incorporated under the laws of Delaware, with a capitalization of \$2,000,000. Incorporators: R. Eichman, Louis B. Jump, of New York.

The report of the Semet-Solvay Company for the year ended December 31, 1917 shows gross earnings of \$8,340,258 against \$10,983,918 for eleven months ended December 31, 1916; net earnings of \$7,061,502, against \$10,536,611; dividends, \$1,599,992, against \$1,300,000; final surplus, \$9,627,905, against \$8,487,846.



## Heavy Chemical Markets

### CHEMICAL PRICES TENDING UPWARD

#### Acids Continue Firm on Heavy Government Buying and Limited Stocks—Bleaching Powder Supplies Growing Scarce—Speculation in Caustic Soda Continues

A good inquiry has been noted for heavy chemicals and on several important items trading has shown improvement. The more favorable weather and better transportation facilities are primarily responsible for the improvement. The Presidential proclamations placing all import and export commerce under restrictions have created further uncertainty, however, and until this new arrangement is further worked out business will continue to feel the influence of the present regulations. A number of heavy chemicals are in scant spot supply, and in the main, where price changes have occurred the tendency has been again upward.

Very little of the acids is available on spot. The Government continues to take for its own use the bulk of the output. Prices are without important alteration and in the majority of cases figures named continue purely nominal.

There is not much buying interest in caustic soda and prices have fluctuated on account of dealer speculation. It is said that supplies are sufficient to take care of a larger volume of business and there is little question that closing prices could be shaded on firm bids. Soda ash in barrels continues scarce and because of a steady inquiry higher prices are heard in some quarters.

All the alums have remained quiet, with slightly lower prices named on the lump ammonia and the lump potassium, but in quantity most of the large holders of spot supplies are quoting at firmer levels. Aluminum sulphate is firm and prices show a slight advance over those of a week ago for large quantities. Supplies of spot and nearby material are said to be unusually small. Bleaching powder is firm and because of recent heavy buying the local market has been practically stripped of spot material. The Government continues to show much interest in the future output and for this reason few quotations are heard for delivery over the year.

Only small odd parcels of acetate of lime are offered since the entire output is now being controlled from Washington and the largest factors here say they have no way of knowing when they will be in a position to place any material in the open market. Copper sulphate is in good inquiry but not a great deal of activity has been noted and some holders would be willing to shade prices on firm bids. Prices continue high on caustic potash.

**Acid, Acetic**—Because of light supplies prices are still nominal and it is hard to obtain quotations on large business. There is a strong consumer call from all directions, but because the Government is taking the bulk of the output, other interests are not being supplied. Closing nominal figures ranged from  $5\frac{3}{4}c$  to  $6\frac{1}{4}c$  a pound for the 28 per cent. material;  $11c$  to  $12\frac{1}{4}c$  a pound for the 56 per cent.,  $14\frac{1}{4}c$  to  $15\frac{1}{4}c$  a pound for the 70 per cent.;  $19\frac{3}{4}c$  to  $21\frac{3}{4}c$  a pound for the 80 per cent. and  $34\frac{3}{4}c$  to  $36c$  a pound for the glacial.

**Acid, Muriatic**—The consumer call continues heavy, but little acid is available on spot and aside from the 20 degree test the bulk of the present output is going

to the Government for the manufacture of munitions. Small spot lots of the 20 degree have been quoted in the open market at  $2\frac{3}{4}c$  to  $3\frac{1}{4}c$  a pound, according to quantity, and at the close from one direction the inside figure of  $2\frac{1}{2}c$  a pound was named. The 22 degree test is quoted at  $3\frac{1}{4}c$  to  $3\frac{3}{4}c$  a pound, with some asking as high as  $4c$  a pound.

**Acid, Nitric**—Most of the leading producers of nitric acid are still out of the market. It is understood that manufacturers of nitric are having their hands full taking care of Government requirements. Users throughout the country are inquiring for all positions but only nominal quotations are heard at  $7\frac{1}{4}c$  to  $7\frac{3}{4}c$  a pound for the 36 degree test;  $7\frac{3}{4}c$  to  $8\frac{1}{4}c$  a pound for the 38 degree nitric;  $9\frac{1}{4}c$  to  $10c$  a pound for the 40 degree, and  $9\frac{3}{4}c$  to  $10\frac{1}{4}c$  a pound for 42 degree material.

**Acid Sulphuric**—Manufacturers of sulphuric are confining their efforts to filling Government requirements and taking care of old contracts. Second hands are occasionally offering small lots of sulphuric on the spot at prices higher than the nominal figures named by manufacturers. Nominally quotations are  $\$41.00$  to  $\$42.00$  a ton for the 66 degree material, and from  $\$35.00$  to  $\$37.00$  a ton for the 60 degree test, drums extra in each case.

**Alums**—Although slightly lower prices were heard at the close on several of the important grades of alums, it appears that these figures governed only small quantities. Spot stocks are not large and sellers say that under present conditions they are not inclined to cut prices materially despite the somewhat slow buying interest. In quantity the following prices have prevailed: Ammonium lump alum,  $4\frac{1}{4}c$  to  $4\frac{3}{4}c$  a pound; potassium lump  $7\frac{3}{4}c$  to  $8\frac{1}{4}c$  a pound; potassium chrome,  $21c$  to  $22\frac{1}{2}c$  a pound, and  $18\frac{1}{2}c$  to  $19\frac{1}{2}c$  a pound for the ammonium chrome.

**Aluminum Sulphate**—The demand for this material is sufficient to sustain prices even at the recent level of  $2\frac{1}{4}c$  to  $2\frac{3}{4}c$  a pound for the commercial, or low grade, and from  $2\frac{1}{2}c$  to  $3\frac{1}{4}c$  a pound for the iron free, or high grade. Not a great deal of spot material of either grade is to be had and because of the steady inquiry the undertone of the market is firm.

**Bleaching Powder**—The Government continues to be the largest single factor in trading. With a steady call, and with limited supplies the condition is firm. Small export drums are being offered in light quantity at  $3c$  to  $4c$  a pound, while in domestic drums sellers are reluctant to do business at less than  $2\frac{1}{2}c$  a pound, with several holding at  $2\frac{3}{4}c$  a pound.

**Calcium Acetate**—Prices are entirely nominal at the old level of  $\$6.00$  to  $\$6.05$  per hundred pounds as the Government has taken over the bulk of the production and producers must await decisions from Washington before they can place any material on the open market.

**Copper Sulphate**—There is a steady demand and sellers are not inclined to lower prices materially on spot or nearby stocks. Nichols brand is offered moderately on spot at  $9\frac{1}{2}c$  to  $9\frac{3}{4}c$  a pound, according to quantity. The price range of the other brands is from  $9\frac{1}{8}c$  to  $9\frac{1}{4}c$  a pound.

**Lead Acetate**—Spot supplies of all grades of acetate of lead continue light and prices closed firm at  $12\frac{3}{4}c$  to  $13\frac{1}{4}c$  a pound for the brown sugar;  $16\frac{1}{4}c$  to  $17\frac{1}{4}c$

a pound for the white crystals;  $15\frac{3}{4}c@16\frac{1}{4}c$  a pound for the broken cakes, and  $16\frac{1}{4}c@17\frac{1}{2}c$  a pound for the granulated. There has been heavy consumer buying of all varieties and the spot market has been practically cleaned up.

**Magnesite**—Steady buying is reported on every hand and prices are holding firm at former levels. It is stated that supplies, while not abundant, are sufficient to take care of the present consumer call, but considerable trouble is being experienced in moving stocks promptly from the coast on account of freight embargoes. The ground material is quoted on spot at \$65 a ton, New York, while California material, calcined or dead, is still available at \$40.00 a ton, California, with a freight rate of \$12.50 on the ton.

**Potash, Caustic**—Most sellers are not inclined to shade  $84c$  a pound for the light test, and there continue offers of a Western production at  $81c@81\frac{1}{2}c$  a pound, for the 88-92 per cent. material. The lowest test was available at  $63\frac{1}{2}c@64\frac{1}{2}c$  a pound, according to quantity. The inquiry from all directions is reported heavy. Spot supplies of caustic potash continue light and in some quarters it is stated that trouble is experienced in locating sufficient spot stocks to take care of the volume of business being placed.

**Potassium, Prussiate**—Prices have been well sustained and trading limited to spot stocks. For the yellow, on spot and afloat importers of the Japanese stocks are quoting firmly at \$1.25 to \$1.30 a pound, and for the red prices range from \$2.25 to \$2.60 a pound, according to quantity. The demand is strong with supplies barely sufficient to cover.

**Saltpetre**—Closing prices were  $28\frac{1}{2}c@29c$  a pound for the granulated;  $29c@29\frac{1}{2}c$  a pound for the powdered, and  $31\frac{1}{4}c@31\frac{1}{2}c$  a pound for the refined, or crystals. The demand is steady and a large volume of business has passed. The output is below normal and spot stocks are moderate.

**Soda, Caustic**—Caustic soda has revealed further evidence of weakness and despite the very favorable offerings the figures quoted at the close ranged between  $5\frac{1}{2}c@5\frac{3}{4}c$  a pound. From one or two directions several spot cars were available at  $5\frac{1}{2}c$  a pound. For delivery over March a flat price of  $5c$  a pound is heard. On contracts over the next three months offerings have been made at  $5\frac{1}{2}c@5\frac{3}{4}c$  a pound, while over the next six months around at  $5\frac{1}{2}c$  a pound is the price generally heard.

**Soda Ash**—Early in the week sales of light ash in double bags were made at  $3\frac{3}{4}c$  a pound, spot, San Francisco. Buyers have been displaying little interest, except for barrels of dense ash, but prices have prevented the consummation of pending deals. At the close, light ash was available at  $3c$  a pound. Barrels of light ash, rolling, could be had at  $4c$  a pound and up, which barrels at works were quoted at  $3\frac{1}{4}c$  a pound and up.

**Sodium Nitrate**—Importers are quoting firmly at \$4.50 a hundred pounds for the crude. The market continues unsettled because of the recent action of the Government in direct purchases of nitrate of soda for direct distribution to farmers. Arrivals at this port from Chile have not been heavy.

#### EXPLOSION AT DU PONT PLANT

An explosion in a wet mixer mill at the plant of du Pont de Nemours & Co., Wayne, N. J., ten miles from Paterson, set fire to the weighing house which was destroyed. A Federal investigation into the cause of the explosion has been ordered.

### *In The Chemical Field*

William S. Gray & Co. have advanced denatured alcohol to  $73c$  per gallon in carloads.

Fire, on Feb. 4, badly damaged buildings numbers 9 and 13 at the plant of the Mallinckrodt Chemical Works, St. Louis, Mo.

The Syn Galenic Chemical Company, Sandusky, Ohio, has filed notice of an increase in its capital from \$20,000 to \$50,000 to provide for expansion.

Castorseed to the amount of 7,682 bags arrived at London on January 26. Nine hundred tons of castorseed arrived at Hull on January 22.

The British Government has decided to make loans of several million pounds to dye making firms to extend their plants and carry on research work.

The reduction plant of the Syracuse Rendering Company, Syracuse, N. Y., was recently destroyed by fire with total loss estimated at approximately \$60,000. C. F. Farnsworth is general manager.

Miss Helen Updegraff, Newark, Del., a graduate of Cornell University, has been appointed assistant chemist at the Delaware College experiment station, Newark, succeeding Professor A. C. Whittier, resigned.

Jacob S. Popper is under arrest in New York for having explosives in his possession. He had a laboratory for testing high explosives and the Army Intelligence Service are investigating the extent of his activities.

The State Senate, Trenton, N. J., has passed a bill introduced by Senator Richards, providing that members of the State Board of Pharmacy shall be appointed by the Governor from a list furnished by the New Jersey Pharmaceutical Association.

Fire recently destroyed the plant of the Beaver Manufacturing Company, Essex and Pearson streets, Andover, Mass., manufacturer of chemicals, with loss estimated at about \$80,000. The company was engaged upon important Government contracts at the time of the fire.

The General Chemical Company has declared the usual quarterly dividend of  $1\frac{1}{2}$  per cent. on its preferred stock payable April 1 to holders of record March 18. At the annual meeting of the stockholders the retiring directors were re-elected. Subsequently the board organized by re-electing the old officers. Dr. Wm. H. Nichols is chairman of the Board. W. H. Nichols, Jr., is president.

E. J. du Pont de Nemours & Co., have applied to the Federal Trade Board for licenses to use certain blue dyes for which patents were issued to German companies. There are twenty-three applications on file similar to the following: "Patent No. 724789, April 7, 1903, to Rene Bohn, of Mannheim, Germany, assignor to Badische Anilin and Soda Fabrik, of Ludwigshafen-on-the-Rhine, Germany, a corporation. Blue dye and process of making same."

# The Drug & Chemical Markets

## LARGER INQUIRIES, BUT TRADING RESTRICTED

### New York Importers Unable to Obtain Supplies— Price Changes are Mainly Upward—Transportation Delays Hamper Drug Deliveries—No Shipping Facilities from Primary Markets

Increased inquiries for drugs and pharmaceutical chemicals are reported in the trade, but sales are restricted owing to short supplies of crude materials and scarcity of finished products.

Price advances occurred in American refined and Japanese camphor. Botanical drugs are higher. Golden seal root and St. Vincent arrowroot were advanced. Tinnevelly senna leaves declined. Some price gains for barks were established. Transportation delays make it difficult to replenish stocks. Trading in medicinal gums is slow, but short supplies are keeping prices up.

Seeds and herbs are unsettled. Prospect of replenishing stocks to meet spring and summer requirements are not favorable. It is generally conceded by leading interests that prices will reach high levels. Spices used in the manufacture of drugs and essential oils are scarcer than at any time in sixty years. Numerous grades are out of the market and prices in the near future will be quoted nominal. Nearly all spices are quoted lower here than in the Orient and other primary producing markets, but there are no ships to bring the supplies to this market.

Phenolphthalein and acetphenetidin are lower. Essential oils scored sharp advances particularly for cumin and patchouli. Oil of bergamot was an exception, due to an accumulation of stocks.

Cable advices from Marseilles reported that the French Government had prohibited further exports of foenugreek seed.

### PRICE CHANGES IN NEW YORK (Original Packages)

#### Advanced

Alcohol, Denatured, 2c	Mastic Gum, 4c
Arrowroot, St. Vincent, 3c	Menthol, 5c
Buchu Leaves, Long, Short, 5c	Nutmegs, Singapore 110s, 1c
Camphor, Japanese, 10½c	Oil of Cassia, 5c
Camphor, American Refined, 8c	Cumin, \$1
Cassia, China, Selected, 1c	Patchouli, \$2
Saigon, 1c	Peppermint, 5c
Cloves, Zanzibar, 3c	Sodium Bicarbonate, 10c per 100 lbs.
Gilead Balm, 9c	
Golden Seal Root, 50c	

#### Declined

Acetphenetidin, 25c	Senna Leaves, Tinnevelly, 2½c
Oil of Bergamot, 30c	Tamarinds, 20c per keg
Phenolphthalein, \$2.75	Tillia Flowers, Without Leaves, 2c
Silver Nitrate, 1½c	

**Acetphenetidin**—Owing to increased offerings and keener selling competition, prices declined 25c a pound. Sellers are quoting from \$4.75 to \$5.00 a pound.

**Alcohol, Denatured**—Leading makers advanced quotations 2c a gallon for car-lots. Offerings of spot lots ranged from 73c to 74c a gallon for 180 proof. The rise was attributed to a better demand and further curtailment of stocks.

**Arsenic**—Trading is inactive, large buyers having ample supplies for several months. White arsenic is offered at ¼c lower to 16c @ 16½c a pound for carlots on the spot. Futures are offered at 15c a pound.

**Arrow Root**—St. Vincent root closed firmer under smallness of supplies and limited spot offerings. Holders in most quarters are quoting 14c @ 15c a pound, showing a gain of 3c a pound over recent sales.

**Asafoetida Gum**—The trend of the market is firmer due to small arrivals and further diminution of spot supplies. Sellers in some quarters are refusing to accept bids below \$1.65 for lump gum while others are asking \$1.70 a pound.

**Bismuth Salts**—The market shows a strengthening tendency and in some quarters a rise in prices is predicted, based on lighter stocks and higher costs of production. Spot lots of bismuth citrated are quoted at \$3.30 a pound.

**Buchu Leaves**—The market has strengthened under a further reduction in spot stocks. Importers are asking 5c advance to \$1.25 @ \$1.30 for short and \$1.40 @ \$1.45 a pound for short leaves on the spot.

**Camphor**—Offers of refined Japan 2½-pound slabs were cabled at a price equivalent to 87½c a pound for March-April shipment. The Japanese will make no direct shipments of camphor to London for the next three months. The United States is receiving fairly regular consignments so that British supplies are likely to be drawn from this source. Toward the close of the market American refiners raised prices on domestic refined 8c to the basis of 92½c a pound for supplies in bulk, barrels added. Japanese camphor was raised 10½c on the basis of 92½c a pound for 2½-pound slabs.

**Codeine**—Makers are repeating prices on the bulk basis of \$8.05 a pound for sulphate supplies, cans included.

**Glycerin, C. P.**—The demand is light and a renewal of selling pressure is apparent. Refiners are quoting 67½c in drums and 69c a pound in cans, immediate delivery. For forward deliveries, 67c a pound was named. In the West, producers quoted 66c a pound for chemically pure in drums.

**Glycerin, Crude**—Prices for spot soap-lye loose are slightly easier and closed ½c lower at 46c @ 46½c a pound while saponification is quoted at 50c @ 51c a pound, showing a gain of 1c a pound. Parcels for February-March shipment were offered at 51c a pound for loose, for the 88 per cent.

**Gilead Balm**—Curtailement of stocks led to an advance of 9c a pound. Sellers are quoting 60c @ \$1.05 a pound, as to quality.

**Golden Seal Root**—Prices for whole root scored an advance of 50c a pound, in sympathy with higher primary markets and decreased spot supplies. Holders are naming \$5.30 @ \$5.35 a pound.

**Mastic Gum**—Scant supplies in primary markets abroad and moderate stocks here caused a firmer sentiment among local importers. Prices were advanced 4c and sellers are quoting 69c @ 80c a pound as to grade.

**Menthol**—The market closed firmer under a better demand and stronger advices from Japan. Offerings are larger and spot lots were lowered 5c to \$3.25 @ \$3.30 a pound. In some quarters \$3.50 a pound is named.

**Mercury**—The supply here is light and prices closed firm. Sellers continue to quote a wide margin ranging from \$125 @ \$135 a flask of 75 pounds. Offerings from the coast, according to reports, are more liberal for immediate shipment at a shade lower.

**Morphine**—Manufacturers are repeating former prices on the basis of \$12.80 an ounce for sulphate in bulk, 5 ounce cans included. As the crude material remains scarce and firm, lower prices are not expected in the



near future. Second hands are offering supplies at makers' prices. The Persian gum has so much lower morphine content that the output of morphine is more restricted.

**Oil of Bergamot**—More liberal offerings due to easier primary markets led to a decline of 30c a pound. Sellers are quoting spot lots at \$5.45@5.80 a pound as to brand.

**Oil of Cassia**—Owing to the increased cost of cassias and uncertainties as to arrivals of fresh stocks, prices are likely to go higher. Holders of all grades of cassia oil have raised spot quotations 5c to the basis of \$1.75 @ \$1.85 a pound for lead free supplies.

**Oil of Clove**—Prices rule strong in sympathy with the price of cloves and smallness of supplies of oil. Handlers, however, are naming former quotations of \$3.20 and upward for supplies in tins and \$3.25 for supplies in bottles, as to brand. Cloves are in active demand by pressers and prices are slowly advancing.

**Oil of Cumin**—Scarcity of seed and a further reduction in the supply of oil caused an advance of \$1 a pound. Handlers in some quarters quoted \$8 while one leading firm named \$9 a pound.

**Oil of Patchouli**—Lack of raw material and smallness of supplies of oil led to a firmer sentiment among holders. Offerings were raised \$2 to \$26@30 a pound, as to brand. The uncertainty regarding further arrivals of crude material is forcing prices upward.

**Oil of Wintergreen**—Leading interests were firm in their views on prices owing to a further decrease in the spot supply. Offerings are moderate at \$4.25 while in many quarters bids below \$4.50 a pound for true leaf supplies are being rejected.

**Opium**—Arrivals of the crude material continue light. Importers are quoting U. S. P. granulated and powdered at \$30@35. Persian is held at \$27@30 a pound. It is reported that larger shipments of gum will be made to the United States, which may improve the situation. Arrivals of opium at Liverpool from January 14 to 19 amounted to 100 cases.

**Phenolphthalein**—Aggressive selling competition culminated in a decidedly weaker market with a sharp drop of \$2.75 a pound. Offerings were made at \$6.50 while some sellers quoted \$7 a pound.

**Quinine**—Trading continues inactive particularly among second hands, but prices remain firm at 85c@88c an ounce for spot sulphate stocks. Domestic makers are repeating former quotations of 75c an ounce for sulphate in bulk, covering 100 ounces, tins included. Arrivals at San Francisco from Batavia comprised 265 cases. Advices from London said that Dutch manufacturers are expected in the market for January-February shipment from Holland.

**Resorcin**—Competition among sellers has led to an irregular market. Prices of U. S. P. supplies ruled nominally unchanged with sellers quoting \$8.50@9 a pound.

**Saccharin**—Price of insoluble guaranteed goods closed steadier under limited supplies for immediate delivery. For delivery within three weeks offerings at \$22@22.25 a pound were reported, while scattered small odd lots were held at \$22 a pound for immediate delivery. Some manufacturers, according to reports, are sold up for the next 60 days, and futures were offered at about \$17, while second hands named from \$18@21 a pound.

**Silver Nitrate**—In response to a lower market for silver, quotations for nitrate of silver were lowered 1½c a pound. Offerings were made at 55½c an ounce for lots of 500 ounces and over.

**Sodium Benzoate**—Increased liquidation of supplies caused a depression. In some quarters the belief prevailed that liquidation had about ended, while others claimed that in order to sustain prices the demand would have to improve materially. Parcels of U. S. P. granulated are quoted at \$4.50@4.90 a pound.

**Senna Leaves, Tinnevely**—Offerings were larger at 12½c@20c a pound as to quality. Accumulation of supplies was given as the cause of the decline.

**Tamarinds**—The market was weaker owing to the anxiety of holders to market their stocks. Supplies in kegs were lowered 20c to \$3.70@3.80 a keg.

**Tin Bichloride**—Limited quantities are being offered at 23¾c@24c a pound, as to size of purchase. The demand is light but prices are firmly maintained owing to the scant supply of tin.

## Of Trade Interest

La Compagnie Chimique Canadienne, dealers in drugs, etc., is registered at Montreal.

Cinchona to the amount of 2,797 bales arrived at Liverpool during the period from Dec. 29 to Jan. 5.

The annual election of the Drug and Chemical Club takes place at 100 William street, Thursday, Feb. 21, at one o'clock.

The area devoted to the cultivation of castor beans in Texas this year may exceed 100,000 acres, according to a report from Austin.

Morris Herrmann of the firm of Morris Herrmann & Co., 200 Fifth avenue, manufacturers and dealers in dry colors, died on February 9 of pneumonia.

Collections from the chemical, drug and dyestuffs trades for the United Hospital Fund in New York for 1917 amounted to \$3,842. Leading firms gave from \$25 to \$300 each.

The Montana Chrome Mining Company has been incorporated under the laws of Delaware with a capital stock of \$1,000,000. Incorporators: F. R. Hansell, I. Vernon Pimm, S. C. Seymour, of Philadelphia.

Dr. Strandgard's Medicine Co., Ltd., of Toronto, has been incorporated to manufacture proprietary articles and medicines, with an authorized capital of \$100,000, by Dr. Jean F. Strandgard, Hugh John Macdonald, John Latimer and others.

Jonathan W. Plummer, formerly of Chicago, died recently in Dixon, Ill., at the residence of his son, J. P. Plummer. He was born in Richmond, Ind., where he was engaged in the wholesale drug business. In 1876 he moved to Chicago where he organized the wholesale drug firm of Morrisson, Plummer & Co., afterwards Plummer & Plummer.

John Clarke & Co. say of herbs and roots: "The market is very active in spot and nearby goods,—the recurring trade needs are large and cover nearly all the articles in the list. For some time past, it has been more and more apparent that unless fresh supplies in most grades should soon appear, there was bound to be serious shortage and resultant violence of fluctuation in spot values. These fresh supplies, excepting in pepper, have not materialized, and the demand from consumers has distinctly broadened again."

# Prices Current of Drugs & Chemicals, Heavy Chemicals & Dyestuffs in Original Packages

**NOTICE** — The prices herein quoted are for large lots in Original Packages as usually Purchased by Manufacturers and Jobbers.

In view of the scarcity of some items subscribers are advised that quotations on such articles are merely nominal, and not always an indication that supplies are to be had at the prices named.

## Drugs and Chemicals

Acetanilid, C.P., bbls. bulk lb.	—	80
Acetone	.35	36
Acetphenetidin	4.75	5.00
*Aconitine, 1/4-oz. vials	—	—
Agar Agar, No. 1	—	57
Alcohol, 188 proof	—	4.93
190 proof, U.S.P.	—	4.95
Cologne Spirit, 190 proof	—	5.05
Wood, ref. 95 p.c.	1.35	1.37
97 p.c.	1.40	1.42
Denatured, 180 proof	—	.73
188 proof	—	.74
Aldehyde	1.25	1.45
Almonds, bitter	.30	32
Sweet	.32	30
Meal	.34	33
Aloin, U. S. P., powd.	—	.80
Aluminum Acetate	.80	.90
*Metallic	—	2.20
Sulphate, C.P.	—	.35
Ambergris, black	10.00	14.00
Grey	24.00	27.00
Ammonium, Acetate, cryst.	.80	.85
Benzoate, cryst., U. S. P.	—	11.00
Bichromate, C. P.	—	1.20
Bromide, gran., bulk	.75	.76
Carb.Dom. U.S. kegs, powd	.11	.12
Resub., Cubes	—	.33
Hypophosphite	—	2.15
Iodide	—	4.20
Molybdate, Pure	—	7.00
Muriate, C. P.	—	.45
Nitrate, cryst., C. P.	.25	.26
Gran.	—	.54
Oxalate, Pure	—	1.15
Persulphate	—	1.25
Phosphate (Dibasic)	—	.60
Salicylate	1.50	1.63
Amyl Acetate, bulk	5.35	5.40
Antimony Chlor. (Sol. butter of Antimony)	.18	.20
Needle powder	.14	.15
Sulphate, 16-17 per cent. free sulphur	.50	.52
Antipyrine, bulk	21.00	22.00
Apomorphine Hydrochloride	—	31.20
Areca Nuts	.28	.29
Powdered	.33	.34
Argols	.16	.18
*Arsenic, red	.65	.66
White	.16	16 1/4
Atropine, Alk. U.S.P., 1-oz. v.	—	47.50
Sulphate, U.S.P., 1-oz. v. oz.	—	37.50
Balm of Gilead buds	.60	1.05
*Barium Carb. prec., pure	—	—
*Chlorate, pure	—	—
Bay Rum, Porto Rico	3.35	3.50
St. Thomas	3.85	4.00
Benzaldehyde (see bitter oil of almonds)	—	—
Benzol, See Coal Tar Crudes	—	—
Berberine, Sulphate, 1-oz. c.v. oz.	2.50	3.00
Beta Naphthol (see Intermediates)	—	—
Bismuth, Citrate U.S.P.	—	3.30
Salicylate	—	3.15
Subcarbonate, U.S.P.	—	3.25
Subgallate	—	3.25
Subiodide	—	5.30
Subnitrate	—	2.85
Tannate	—	2.90
Valerate	—	4.50

\*Nominal.

## WHERE TO BUY

### SODIUM SULPHIDE FUSED & CRYSTALS BORAX - Powdered POTASH ALUM (Iron Free)

ALL BELOW THE MARKET.

### CAREX CO. 309 Broadway, N.Y.C.

Borax, in bbls. crystals	.07 3/4	— .08 1/4
Crystals, U.S.P., Kegs.	.09	— .09 1/2
Bromine, U.S.P., tins	—	1.00
Burgundy Pitch	.04 1/4	— .05
*Imported	—	—
Cadmium Bromide, crystals	4.20	— 4.25
Iodide	—	4.40
Metal sticks	2.00	— 2.05
Caffeine, alkaloid, bulk	12.50	— 12.75
Hydrobromide	10.70	— 12.00
Citrated, U.S.P.	7.50	— 7.55
Phosphate	15.00	— 15.75
Sulphate	16.00	— 16.40
Calcium Glycerophosphate	—	2.25
Hypophosphite, 100 lbs.	1.00	— 1.05
Iodide	—	4.10
Phosphate, Precip	.34	— .35
Sulphocarbonate	—	1.40
Calomel, see Mercury	—	—
Camphor, Am. ref'd. bbls. bk. lb.	—	.92 1/2
Square of 4 ounces	—	.93 1/2
16's in 1-lb. carton	—	.96
24's in 1-lb. cartons	—	.96 1/2
32's in 1-lb. cartons	—	.97
Cases of 100 blocks	—	.93
Japan, refined, 2 1/2-lb. slabs lb.	—	.92 1/2
Monobromated	2.80	— 2.85
Cantharides, Chinese	.94	— .98
Powdered	1.25	— 1.30
Russian	4.00	— 4.20
Powdered	4.60	— 4.65
Carbon bisulphide, bulk	.07 1/4	— .08
Casein, C. P.	.44	— .49
Cerium Oxalate	.60	— .61
Chalk, prec. light, English	.04 1/4	— .04 3/4
Heavy	.03 3/4	— .05
Chloral Hydrate, U.S.P. 25-lb. jars	—	1.65
Charcoal Willow, powdered	.04 1/4	— .05
Wood, powdered	.06 1/4	— .07 1/4
Chlorine, liquid	.14 1/2	— .17
Chloroform, drums	.63	— .65
Chrysarobin, U. S. P.	6.20	— 6.45
Cinchonidin, Alk.	—	.94
Cinchonine, Alk., crystals	—	.51
Sulphate	—	.35
Cinnabar	—	3.45
Civet	2.40	— 2.70
Cobalt, pow'd (Fly Poison)	.45	— .49
Oleate	.85	— .96
Cocaine, alkaloid, 1-oz. v.	—	—
Hydrochloride, large cryst., bulk	—	9.25
Cocoa Butter, bulk	.29	— .30 1/2
Cases, fingers	.30 1/4	— .31 1/2
Codeine, Alk., Bulk	—	10.05
Nitrate, Bulk	—	9.05
Phosphate, Bulk	—	7.55
Sulphate, Bulk	—	8.05
Collodion, U.S.P., 1-lb. cans	.45	— .46
Colocynth, Trieste, whole	.26	— .29
Pulp, U.S.P.	.47	— .48
Spanish Apples	.29	— .34
Copper Chloride, pure cryst. lb.	—	.70
Oleate, mass, 1-oz.	—	1.65
20 p.c.	—	—
Corrosive, Sublimate, see Mercury	—	—
Cotton Soluble	.78	— 1.00
Coumarin, refined	23.75	— 24.00
Cream of Tartar, cryst. U.S.P.	—	.54 1/4
Powdered, 99 p.c.	—	.54
Cresosote, U.S.P.	1.85	— 1.95
*Carbonate	26.00	— 27.50
Cresol, U.S.P.	.20	— .21
Cuttlefish Bones, Trieste	.39	— .41
Jewellers large	1.42	— 1.43
Small	1.27	— 1.28

\*Nominal.

Cuttlefish Bone, French	.39	— .41
Dover's Powder, U.S.P.	2.80	— 3.00
Dragon's Blood, Mass.	.34	— .59
Reeds	3.95	— 4.05
Emetine, Alk., 15 gr. vials	—	2.70
Hydrochloride, U.S.P. 15 gr. vials	—	1.80
Epsom Salts (see Mag. Sulph.)	—	—
Ergot, Russian	.77	— .80
Spanish	.77	— .80
Ether, U. S. P., 1900	—	.27
U. S. P., 1880	—	.34
Washed	—	.32
Eucalyptol	1.34	— 1.39
Formaldehyde	.20	— .21
Gelatin, silver	1.37	— 1.42
*Gold	—	—
Glycerin, C. P., bulk	—	—
Drums and bbls. added	.67 1/2	— .68
C. P. in cans	.69	— .69 1/2
Dynamite, drums included	.65	— .66
Saponification, loose	.51	— .51 1/2
Hops, Lye, loose	.46	— .46 1/2
Grains of Paradise	3.20	— 3.25
Guaiacal, liquid	15.00	— 16.00
Guarana	.93	— 1.00
*Haarlem Oil, bottles	—	gross
Hexamethylenetetramine	1.00	— 1.15
Hops, N. Y., 1917 prime	.45	— .50
Pacific Coast, 1917, Prime lb.	.23	— .24
Hydrogen Peroxide, U.S.P., 10 gr. lots	—	—
4-oz. bottles	—	gross
12-oz. bottles	—	gross
16-oz. bottles	—	gross
Hydroquinone	2.00	— 2.10
Ichthyol	—	—
Iodine, Resublimed	4.30	— 4.40
Iodoform, Powdered, bulk	—	5.00
Crystals	—	5.55
Iron Citrate, U.S.P.	—	.77
Phosphate, U.S.P.	—	.77
Pyrophosphate, U.S.P.	—	.77
single, American	.79	— .80
Japanese	.46	— .56
Russian	4.40	— 5.00
Kamala, U. S. P.	2.25	— 2.30
Kola Nuts, Wst Indies	.14	— .15
Lanolin, hydrous, cans	.34	— .39
Anhydrous, cans	.44	— .49
Lead Carbonate, med.	.45	— .50
Chloride	.55	— .60
Iodide, U.S.P.	—	2.95
Licorice, Mass, Syrian	.25	— .29
*Sticks, bbls. Corigliano	.49	— .54
Lupulin, U. S. P.	2.50	— 3.00
Lycopodium, U. S. P.	1.80	— 1.85
Magnesium Carbonate, kegs lb.	.17	— .21
Glycerophosphate	—	4.60
Hypophosphite	2.00	— 2.15
Iodide	—	4.85
Ovide, tins light	—	1.10
Peroxide, cans	—	2.15
Salicylate	1.30	— 1.37
Sulphate, Epsom Salts, tech	—	—
100-lbs.	3.25	— 3.50
Manganese Glycerophos	4.50	— 4.70
Hypophosphite	1.65	— 1.70
Iodide	—	4.85
Peroxide	.78	— .75
Sulphate, crystals	.62	— .68
Manna, large flake	.90	— .95
Small flake	.75	— .77
Menthol, Japanese	3.25	— 3.50
Mercury, flasks, 75 lbs.	125.00	— 135.00
Bisulphate	—	1.50
Blue Mass	—	.83
Powdered	—	.83
Blue Ointment, 30 p. c.	—	.86
50 p. c.	—	1.18
Calomel, American	—	1.91
Corrosive Sublimate cryst. lb.	—	1.76
Powdered, Granular	—	1.71
Iodide, Green	—	4.10
Red	—	4.20
Yellow	—	4.10
Red Precipitate	—	2.10
Powdered	—	2.20
White Precipitate	—	2.20
Powdered	—	2.25

\*Nominal.

# Drugs & Chemicals, Heavy Chemicals and Dyestuffs in Original Packages

## WHERE TO BUY

### Antoine Chiris Company 18-20 PLATT ST., N. Y. MANUFACTURERS & IMPORTERS ESSENTIAL OILS SYNTHETIC CHEMICALS ACETYL SALICYLIC ACID American Works, Delawanna, New Jersey

Soap, Castile, Mottled, pure lb.	.15	— .16
Ordinary	.12	— .13
Sodium, Acetate, U.S.P., gran. lb.	.25	— .29
Benzonate, gran. U.S.P., lb.	4.50	— 4.90
Bicarb. U.S.P., powd., bbls. lb.	.02 1/4	— .03
Bromide, U.S.P., bulk	.65	— .66
Cacodylate	.25	— .30
Citrate, U.S.P., cryst.	.67	— .67
Granular, U.S.P.	.67	— .67
Glycerophosphate, crystals lb.	2.65	— .77
Hypophosphite, U.S.P.	1.10	— 2.70
Iodide, bulk	1.15	— 1.15
Phosphate, U.S.P., gran.	.35	— .35
Recrystallized	.13	— .13
Dried	.17	— .18
Salicylate, U.S.P.	.25	— .26
Sulph. (Glauber's Salt)	.90	— .90
Tungstate	.12	— .12
Spermaceti, blocks	.27	— .28
Spirit Ammonia, U. S. P.	.45	— .55
Aromatic, U. S. P.	.47	— .55
Nitrous Ether, U. S. P.	.48	— .48
Ether Comp.	.48	— .48
Storax, liquid cases	.165	— .165
Strontium Bromide, bulk	3.60	— 4.60
Iodide, bulk	.75	— .76
Nitrate	.35	— .35
Salicylate, U.S.P.	.24	— .29
Strychnine Alkd. cryst., vial oz.	1.25	— 1.30
Nitrate	2.35	— 2.35
Sulphate, crystals, bulk	.235	— .235
Acetate	.235	— .235
Sugar of Milk, powdered	.265	— .265
Sulphonal, 100 oz. lots	.50	— .50
Sulphonethylmethane, U.S.P. lb.	1.25	— 1.50
Sulphonmethane, U.S.P. lb.	15.00	— 16.00
Sulphur, bbls. roll	12.95	— 13.95
Flour	100 lbs.	3.70
Flowers	100 lbs.	3.85
Tamarinds	100 lbs.	4.00
Kegs	100 lbs.	.07 1/2
Tartar Emetic, U.S.P.	per keg	3.70
Casks	100 lbs.	.66
Terpin Hydrate	100 lbs.	.60 1/2
Thymol, crystals, U.S.P.	100 lbs.	.56
Iodide, U.S.P., bulk	15.50	— 16.00
Tin, bichloride, bbls.	100 lbs.	— 16.55
Oxide, 500 lb. bbls.	100 lbs.	.23 1/4
Toluol. See Coal Tar Crudes.	100 lbs.	.75
Turpentine, Venice, True	100 lbs.	3.65
Artificial	100 lbs.	— 3.75
Spirits, see Naval Stores.	100 lbs.	.12
Vanillin	100 lbs.	.75
Witch Hazel Ext., dble dist.	100 lbs.	.75
bbl.	100 lbs.	1.18
Zinc Carbonate	100 lbs.	.23
Chloride	100 lbs.	.16
Iodide, bulk	100 lbs.	— 17
Metallic, C. P.	100 lbs.	— 4.00
Oxide, Powd. U.S.P., bbls. lb.	100 lbs.	.45
	100 lbs.	.41

## Acids

Acetic, 56 p.c.	100 lbs.	.11	— .12 1/2
Glacial, 99 p.c. carboys	100 lbs.	.34 1/4	— .36
Acetyl-salicylic	100 lbs.	2.75	— 3.00
Benzoic, from gum	100 lbs.	—	—
ex. Toluol	100 lbs.	—	—
Boric, cryst., bbls.	100 lbs.	—	6.00
Powdered, bbls.	100 lbs.	.13 1/4	— .15
Butyric, Tech., 60 p.c.	100 lbs.	.13 1/4	— .15
Camphoric	100 lbs.	1.45	— 1.55
*Carbolic, cryst., U.S.P., drs. lb.	100 lbs.	4.35	— 4.45
1-lb. bottles	100 lbs.	.54	— .55
5-lb. bottles	100 lbs.	.60	— .61
50 to 100-lb. tins	100 lbs.	.57	— .58
Chrysophanic	100 lbs.	.55	— .56
*Nominal	100 lbs.	6.20	— 6.35

Citric, crystals, bbls.	100 lbs.	.75	— .75 1/2
Powdered	100 lbs.	.75 1/2	— .76
Cresylic, 95-100 p.c.	100 gal.	1.10	— 1.15
Chromic, U.S.P.	100 lbs.	1.25	— 1.30
*Formic, 75 p.c. tech.	100 lbs.	.40	— .45
Gallic, U.S.P., bulk	100 lbs.	1.55	— 1.60
Glycerophosphoric	100 lbs.	3.45	— 3.50
Hydroiodic, sp. g. 1.150	100 oz.	.25	— .30
Hydrobromic, Conc.	100 lb.	2.40	— 2.45
Hydrocyanic, U.S.P.	100 lb.	.35	— .40
Dilute 3 p.c.	100 lb.	.20	— .25
Hypophosphorous, 50 p.c.	100 lb.	2.05	— 2.10
U. S. P., 10 p.c.	100 lb.	.53	— .55
Lactic, U.S.P., VIII	100 lb.	2.40	— 2.45
Molybdic, C.P.	100 lb.	6.90	— 7.40
Muriatic, 20 deg. carboys	100 lb.	.02 1/4	— .03 1/4
Nitric, 42 deg. carboys	100 lb.	.02 1/4	— .03 1/4
Nitro Muriatic	100 lb.	.20	— .20 1/2
Oleic, purified	100 lb.	.23	— .28
Oxalic, cryst.	100 lb.	.46	— .50
*Picric, kegs	100 lb.	.85	— 1.00
Pyrophoric, U. S. P.	100 lb.	.65	— .75
Pyrogallic, resublimed	100 lb.	3.15	— 3.25
Crystals, bottles	100 lb.	3.00	— 3.10
Pyromet	100 lb.	.12	— .12 1/2
Technical	100 lb.	.90	— 1.35
Salicylic, bulk, U.S.P.	100 lb.	.25	— .27
Stearic, triple pressed	100 lb.	.07	— .08
Sulphuric, C.P.	100 lb.	.03	— .05
Sulphurous	100 lb.	1.35	— 1.40
Tannic, U.S.P., bulk	100 lb.	.78	— .80
Tartaric Crystals, U.S.P.	100 lb.	.77 1/2	— .79
Powdered, U.S.P.	100 lb.	.77 1/2	— .79

## Essential Oils

Almond, bitter	100 lbs.	12.75	— 15.00
Artificial, chlorine traces	100 lbs.	4.50	— 5.00
Free from chlorine	100 lbs.	4.75	— 5.00
Amber, crude	100 lbs.	1.45	— 1.50
Rectified	100 lbs.	1.75	— 1.85
Anise	100 lbs.	2.40	— 2.60
Bay	100 lbs.	5.00	— 5.80
Bergamot	100 lbs.	3.50	— 4.50
Synthetic	100 lbs.	4.50	— 4.75
Bois de Rose	100 lbs.	1.00	— 1.10
Cade	100 lbs.	.75	— .80
Cajuput, bottle, Native, ca.	100 lbs.	.15	— .16
Camphor, heavy gravity	100 lbs.	.17	— .18
Japanese, white	100 lbs.	8.00	— 8.25
Caraway	100 lbs.	1.70	— 1.75
Cassia, 75-80 p.c. tech	100 lbs.	1.75	— 1.85
Lead Free	100 lbs.	1.25	— 1.25
Redistilled, U.S.P.	100 lbs.	1.25	— 1.25
Cedar Leaf	100 lbs.	.18	— .19
Cedar Wood	100 lbs.	22.00	— 24.00
Cinnamon, Ceylon, heavy	100 lbs.	.52	— .54
Citronella, Ceylon, drums	100 lbs.	.75	— .77
Java	100 lbs.	3.25	— 3.35
Cloves, cans	100 lbs.	1.05	— 1.10
Bottles	100 lbs.	8.00	— 9.00
Coriander	100 lbs.	1.75	— 2.00
Cubeb	100 lbs.	6.75	— 7.00
Cumin	100 lbs.	1.75	— 2.00
Eriogon	100 lbs.	.55	— .65
Eucalyptus, Australian	100 lbs.	3.75	— 4.00
Fennel, sweet	100 lbs.	6.00	— 7.00
Geranium, rose, African	100 lbs.	5.40	— 5.45
Bourbon	100 lbs.	4.40	— 4.60
Ginger	100 lbs.	8.00	— 8.50
Gingergrass	100 lbs.	2.00	— 2.10
Hemlock	100 lbs.	1.20	— 1.35
Juniper Berries, rect.	100 lbs.	15.00	— 16.00
Wood	100 lbs.	16.00	— 17.00
Lavender Flowers	100 lbs.	2.00	— 2.50
Spike	100 lbs.	5.25	— 5.75
Garden	100 lbs.	.90	— 1.45
Lemon, U.S.P.	100 lbs.	.65	— 1.10
Lemongrass	100 lbs.	.97 1/2	— 1.05
Limes, Expressed	100 lbs.	1.35	— 1.40
Distilled	100 lbs.	5.50	— 5.75
Linaloe	100 lbs.	2.10	— 2.25
Mace, distilled	100 lbs.	2.85	— 3.00
Mustard, natural	100 lbs.	2.25	— 2.50
Artificial	100 lbs.	30.00	— 32.00
Neroli, bigarade	100 lbs.	21.00	— 22.00
Petal	100 lbs.	60.00	— 75.00
Artificial	100 lbs.	80.00	— 90.00
Nutmeg	100 lbs.	18.00	— 25.00
Orange, bitter, W. Indian	100 lbs.	2.25	— 2.50
Sweet, West Indian	100 lbs.	1.90	— 2.00
Italian, sweet	100 lbs.	1.90	— 2.00
Oris, Concreati	100 lbs.	2.60	— 2.85
Origanum	100 lbs.	4.50	— 5.00
Imitation	100 lbs.	.25	— .30
Patichouli	100 lbs.	26.00	— 30.00
Pennyroyal	100 lbs.	1.65	— 1.80
Imported	100 lbs.	1.15	— 1.40

Methylene Blue, medicinal	100 lb.	12.00	— 14.00
Milk, powdered	100 lb.	.16	— .19
Mirbane Oil, refined, drums	100 lb.	.17 1/4	— .19 1/4
Morphine, Acet. bulk	100 oz.	—	— 12.80
Sulphate, bulk	100 oz.	—	— 12.80
Diacetyl, Hydrochloride, 5-oz. cans	100 oz.	—	— 15.90
Ethyl, Hydrochloride, 1-oz. v. oz.	100 oz.	—	— 18.05
Moss, Iceland	100 lb.	.24	— .25
Irish	100 lb.	.10	— .11
Musk, pods, Cab.	100 lb.	.10	— .11
Tonquin	100 lb.	.10	— .11
Grain Cab	100 lb.	.20	— .20 1/2
Tonquin	100 lb.	.18 75	— 19.00
Druggists	100 lb.	.31 25	— 31.75
Synthetic	100 lb.	.30	— .30
Naphthalene, See Coal Tar Products.	100 lb.	11.50	— 12.75
Nickel and Ammon. Sulphate	100 lb.	—	— .22
Sulphate	100 lb.	.27	— .29
Nux Vomica, whole	100 lb.	.12	— .13
Powdered	100 lb.	.17	— .18
*Opium, cases, U.S.P.	100 lb.	—	— 30.00
*Jobbing lots	100 lb.	—	— 30.00
Granular	100 lb.	32.00	— 35.00
Powdered, U.S.P.	100 lb.	32.00	— 35.00
Oxgall, pur. U.S.P.	100 lb.	1.50	— 1.55
Papain	100 lb.	3.95	— 4.00
Paraffin White Oil, U.S.P. gal.	100 gal.	3.10	— 3.60
Paris Green, kegs	100 lb.	.43	— .44
*Petrolatum, light amber bbls.	100 lb.	.04 1/2	— .05
Cream	100 lb.	.08	— .08 1/2
Lily White	100 lb.	.09 1/2	— .10
Snow White	100 lb.	.12	— .12 1/2
Phenolphthalein	100 lb.	6.50	— 7.00
*Phosphorus, yellow	100 lb.	—	— 1.70
Red	100 lb.	—	— 1.80
*Pilocarpine, Alk., 10 gr. v. gr.	100 lb.	13.00	— 18.00
Piperin	100 lb.	.85	— .95
Poppy Heads	100 lb.	1.45	— 1.50
Potassium acetate	100 lb.	1.20	— 1.40
Bicarb.	100 lb.	.45	— .60
Bisulphate	100 lb.	.75	— .85
C. P.	100 lb.	1.35	— 1.36
Bromide, (bulk, gran.)	100 lb.	1.60	— 1.60
Citrate, bulk	100 lb.	1.45	— 1.45
Glycerophosphate, bulk	100 lb.	2.15	— 2.20
Hypophosphite, bulk	100 lb.	—	— 3.75
Iodide, bulk	100 lb.	—	— .25
Lactophosphate	100 lb.	4.05	— 4.10
Permanganate, U.S.P.	100 lb.	2.90	— 2.95
Salicylate	100 lb.	1.11	— 1.16
Sulphate, C.P.	100 lb.	1.31	— 1.32
Tartrate, powdered	100 lb.	—	— .75
Quinine, Sulph. 100 oz. tins	100 oz.	—	— .75 1/2
50-oz. tins	100 oz.	—	— .76
25-oz. tins	100 oz.	—	— .77
1-oz. tins	100 oz.	—	— .85
Second Hands	100 oz.	—	— .87
*Amsterdam	100 oz.	—	— .80
*German	100 oz.	—	— .80
*Java	100 oz.	—	— .40
Quinidine Alk. crystals, tins	100 oz.	8.50	— 9.00
Sulphate, tins	100 oz.	—	— .57
Resorcin crystals, U.S.P.	100 lb.	.39	— .40
Rochelle Salt, crystals, bxs., lb.	100 lb.	25.00	— 27.00
Powdered, bbls.	100 lb.	22.00	— 23.00
Saccharin, U.S.P., soluble	100 lb.	16.00	— 17.00
U.S.P., Insoluble	100 lb.	—	— 1.65
Salicin, bulk	100 lb.	—	— .37.50
Salol, U.S.P., bulk	100 lb.	37.00	— 37.75
Sandalwood	100 lb.	—	— .30 1/2
Ground	100 lb.	—	— .55 1/2
Santonin, cryst., U.S.P.	100 lb.	—	— .41
Powdered	100 lb.	—	— .19
Scammony, resin	100 lb.	—	— .17
Seidlitz Mixture, bbls.	100 lb.	—	— .14
Silver Nitrate 500-oz. lots	100 oz.	—	— .15
Soap, Castile, white, pure	100 lb.	—	— .19 1/2
Marseilles, white	100 lb.	—	— .17
Green, pure	100 lb.	—	— .18
Ordinary	100 lb.	—	— .14
*Nominal	100 lb.	—	— .15



## Drugs &amp; Chemicals, Heavy Chemicals and Dyestuffs in Original Packages

Peppermint, tins .....	lb.	3.30	— 3.40
Bulk .....	lb.	3.25	— 3.30
Petit Grain, So. America .....	lb.	3.50	— 3.60
French .....	lb.	7.00	— 8.00
Pimento .....	lb.	2.70	— 2.85
Pine Needles .....	lb.	2.20	— 2.30
Rose, natural .....	oz.	24.50	— 28.00
Synthetic .....	oz.	2.50	— 4.00
Rosemary, French .....	lb.	.85	— .90
Safrol .....	lb.	.40	— .45
Sandalwood, East India .....	lb.	13.50	— 14.00
West Indian .....	lb.	11.00	— 11.25
Sassafras, natural .....	lb.	—	— 1.65
Artificial .....	lb.	.28	— .29
*Savin .....	lb.	—	— 6.50
*Spear-mint .....	lb.	3.50	— 3.75
Tansy .....	lb.	1.00	— 1.25
*Spruce .....	lb.	3.00	— 3.75
Thyme, red, French .....	lb.	1.60	— 1.75
White, French .....	lb.	1.75	— 2.00
*Wine, Ethereal, light .....	lb.	—	—
Wintergreen, leaves, true .....	lb.	4.25	— 4.50
Birch, Sweet .....	lb.	2.30	— 2.50
Synthetic, U.S.P. bulk .....	lb.	.85	— .90
Wormseed .....	lb.	9.00	— 9.25
Wormwood .....	lb.	4.25	— 4.50
Ylang Ylang, Bourbon .....	lb.	12.50	— 15.00
Manila .....	lb.	35.00	— 40.00
Artificial .....	lb.	10.00	— 24.00

## OLEORESINS

Aspidium (Malefern) .....	lb.	17.50	— 18.00
Capicum, 1-lb. bottles .....	lb.	4.50	— 5.50
Cubeb .....	lb.	—	— 6.00
Ginger .....	lb.	3.50	— 4.50
*Parsley Fruit (Petroselinum) .....	lb.	6.75	— 7.50
Pepper, black .....	lb.	10.50	— 11.75
Mullein (so-called) .....	lb.	1.80	— 2.05
Orris, domestic .....	lb.	4.00	— 5.00
Imported .....	lb.	—	— 16.00

## Crude Drugs

## BALSAMS

Copaiba, Para .....	lb.	.65	— .68
South American .....	lb.	.94	— .98
Fir, Canada .....	gal.	5.90	— 6.25
Oregon .....	gal.	1.20	— 1.30
Peru .....	lb.	3.65	— 3.70
Tolu .....	lb.	.95	— 1.05

## BARKS

Angostura .....	lb.	.59	— .65
Basswood Bark, pressed .....	lb.	.17	— .20
Blackhaw, of root .....	lb.	.27	— .30
Buckthorn .....	lb.	.10	— .12
Calisaya .....	lb.	.22	— .24
Cascara Sagrada .....	lb.	.10	— .13
Cascarilla, quills .....	lb.	.24	— .25
Siftings .....	lb.	.11	— .12
Cinchona, red quills .....	lb.	1.00	— 1.30
Broken .....	lb.	.72	— .76
Yellow "quills" .....	lb.	.56	— .57
*Broken .....	lb.	.30	— .31
*Loxa, pale, ba .....	lb.	.31	— .31
*Powdered, boxes .....	lb.	.31	— .33
*Maracaibo, yellow, powd. .....	lb.	.33	— .40
Condurango .....	lb.	.14	— .15
Cotton Root .....	lb.	.10	— .12
Cramp, true .....	lb.	.55	— .60
Cramp (so-called) .....	lb.	.11	— .12
Dogwood, Jamaica .....	lb.	.08	— .08½
Elm, grinding .....	lb.	.08	— .09
Select bbls. .....	lb.	.17	— .18
Ordinary .....	lb.	.10	— .11
Hemlock .....	lb.	.06½	— .07
Lemon Peel .....	lb.	.08½	— .09
Mezereum .....	lb.	.05½	— .06
Oak, red .....	lb.	.03½	— .04
White .....	lb.	.03	— .05
Orange Peel, bitter .....	lb.	.04	— .05½
Sweet .....	lb.	.13½	— .14
Trieste .....	lb.	.12½	— .13
Prickly Ash, Southern .....	lb.	.12	— .12½
Northern .....	lb.	.14	— .15
Pomegranate .....	lb.	.30	— .32
Of Fruit .....	lb.	.30	— .35
*Quebracho .....	lb.	—	—
Sassafras, ordinary .....	lb.	.07½	— .08½
Select .....	lb.	.15	— .16
Simaruba .....	lb.	.39	— .40
Soap, whole .....	lb.	.09½	— .10
Cut .....	lb.	.16	— .16½
Crushed .....	lb.	.10½	— .11
Wahoo, of Root .....	lb.	.44	— .46
Of Tree .....	lb.	.15	— .16
Willow, Black .....	lb.	.14	— .14½
White .....	lb.	.08	— .09
White Pine .....	lb.	.08	— .09
White Poplar .....	lb.	.03½	— .04
*Nominal .....	lb.	—	—

Wild Cherry .....	lb.	.11	— .15
Witch Hazel .....	lb.	.04	— .05

## SEEDS

Calabar .....	lb.	.39	— .40
St. Ignatius .....	lb.	.24	— .26
St. John's Bread .....	lb.	.07	— .07½
Tonka, Angostian .....	lb.	.87	— .93
Para .....	lb.	.64	— .69
Surinam .....	lb.	.70	— .74
Vanilla, Mexican, whole .....	lb.	4.60	— 5.70
Cuts .....	lb.	3.45	— 3.85
Bourbon .....	lb.	2.05	— 2.70
South American .....	lb.	3.70	— 3.90
Tahiti, White Label .....	lb.	1.45	— 1.50
Green Label .....	lb.	1.30	— 1.40

## BERRIES

Cubeb, ordinary .....	lb.	.94	— .96
XX .....	lb.	1.14	— 1.18
Powdered .....	lb.	1.06	— 1.11
Fish .....	lb.	.11	— .13
Horse, Nettle, dry .....	lb.	.32	— .35
Juniper .....	lb.	.06	— .07
Laurel .....	lb.	.08	— .08½
Poke .....	lb.	.10	— .10½
Prickly Ash .....	lb.	.11½	— .12½
Saw Palmetto .....	lb.	.16	— .18
*Sloe .....	lb.	.16	— .18
Sumac .....	lb.	.05	— .06

## FLOWERS

Arnica .....	lb.	1.60	— 1.70
Powdered .....	lb.	1.55	— 1.65
*Calendula .....	lb.	.60	— .65
Borage .....	lb.	—	—
Chamomile, Belgian .....	lb.	.45	— .50
German .....	lb.	.50	— .55
Hungarian .....	lb.	.45	— .45
Roman .....	lb.	1.40	— 1.15
Spanish .....	lb.	.40	— .40
Clover Tops .....	lb.	.31	— .32
Dogwood .....	lb.	.14	— .15
Elder .....	lb.	.30	— .31
Insect, open .....	lb.	.30	— .35
Closed .....	lb.	.39	— .40
*Powd. Flowers and stems .....	lb.	.34	— .38
*Powd. Flowers .....	lb.	.45	— .50
*Kousso .....	lb.	.45	— .50
Lavender, ordinary .....	lb.	.17	— .18
Select .....	lb.	.29	— .30
Linden, with leaves .....	lb.	.35	— .37
Without leaves .....	lb.	.49	— .59
Malva, blue .....	lb.	3.95	— 4.00
*Black .....	lb.	.53	— .60
*Mullein .....	lb.	.53	— .60
Orange .....	lb.	1.20	— 1.24
Ox-Eye, Daisy .....	lb.	.05	— .05½
Patchouli .....	lb.	.73	— .80
Poppy, red .....	lb.	.98	— 1.20
Rosemary .....	lb.	.53	— .59
Saffron, American .....	lb.	.47	— .50
Valencia .....	lb.	13.00	— 13.45
Tilia (see Linden) .....	lb.	—	—

## GUMS

Aloes, Barbados .....	lb.	1.00	— 1.10
Cape .....	lb.	.10	— .11
Curacao, cases .....	lb.	.09	— .10
Scottrine, lump .....	lb.	.40	— .41
Ammoniac, tears .....	lb.	.80	— .85
Powdered .....	lb.	.85	— .90
Arabic, firsts .....	lb.	.55	— .60
*Seconds .....	lb.	—	—
Sorts Amber .....	lb.	.30	— .31
Powdered .....	lb.	.35	— .40
Asafetida, whole, U. S. P. .....	lb.	1.65	— 1.70
Powdered, U.S.P. .....	lb.	1.80	— 1.85
Benzoine, Siam .....	lb.	1.45	— 1.55
Sumatra .....	lb.	.33	— .36
*Catechu .....	lb.	.24	— .29
*Chicle, Mexican .....	lb.	.80	— .85
Damar Batavia, No. 1 .....	lb.	.21	— .23
Euphorbium .....	lb.	.23	— .24
Powdered .....	lb.	.27	— .28
Galbanum .....	lb.	1.45	— 1.50
Gamboge .....	lb.	—	— 2.00
Hemlock .....	lb.	.38	— .48
Kauri No. 1 .....	lb.	.80	— .90
Kino .....	lb.	.43	— .44
Mastic, powdered .....	lb.	.75	— .80
Myrrh, select .....	lb.	.69	— .80
Sorts .....	lb.	.49	— .50
Siftings .....	lb.	.39	— .43
Olibanum, siftings .....	lb.	.12	— .14
Tears .....	lb.	.17	— .19
Sandarac .....	lb.	.50	— .52
*Senegal, picked .....	lb.	.36	— .42
Sorts .....	lb.	.34	— .39
Thus, per bbl .....	280-lbs.	11.50	— 12.00
Spruce .....	lb.	.65	— .95
Tragacanth, Aleppo firsts .....	lb.	2.15	— 2.30
Seconds .....	lb.	1.75	— 1.85
Thirds .....	lb.	1.40	— 1.70
*Nominal .....	lb.	—	—

*Turkey, firsts .....	lb.	—	— 2.80
*Seconds .....	lb.	2.20	— 2.25
*Thirds .....	lb.	1.95	— 2.00

## LEAVES AND HERBS

Aconite .....	lb.	.34	— .70
Balmoney .....	lb.	.09	— .10
Bay, true .....	lb.	—	—
Belladonna .....	lb.	1.55	— 1.60
Boneset, leaves and tops .....	lb.	.18	— .20
Buchu, short .....	lb.	1.25	— 1.30
Long .....	lb.	1.40	— 1.45
Cannabis, true, imported .....	lb.	3.00	— 3.15
American .....	lb.	1.45	— 1.50
Catnip .....	lb.	.07	— .10
Chestnut .....	lb.	.05	— .06
Chiretta .....	lb.	.41	— .42
*Coca, Huanuco .....	lb.	—	—
*Truxillo .....	lb.	—	—
Coltsfoot .....	lb.	.19	— .21
*Conium .....	lb.	.09½	— .10½
Corn Silk .....	lb.	.16	— .18
Damiana .....	lb.	.19	— .20
Deer Tongue .....	lb.	.44	— .45
Digitalis, Domestic .....	lb.	.70	— .75
*Imported .....	lb.	—	—
Eucalyptus .....	lb.	.09½	— .11
Euphorbia Pilulifera .....	lb.	.20	— .21
Grindelia Robusta .....	lb.	.09	— .11½
*Henbane, German .....	lb.	—	—
*Russian .....	lb.	—	—
Domestic .....	lb.	2.00	— 2.05
Henn .....	lb.	.20	— .22
Horehound .....	lb.	.22	— .23
Jaborandi .....	lb.	.25	— .28
Laurel .....	lb.	.13½	— .13¾
Life Everlasting .....	lb.	.06	— .07
Liverwort .....	lb.	.46	— .49
Lobelia .....	lb.	.08	— .08½
Matico .....	lb.	.27	— .30
*Majoram, German .....	lb.	—	—
*French .....	lb.	—	—
Pennyroyal .....	lb.	.15½	— .24
Peppermint, American .....	lb.	.16	— .20
Pichi .....	lb.	.09	— .10
Prince's Pine .....	lb.	.12	— .15
*Plantain .....	lb.	.10½	— .11
*Pulsatilla .....	lb.	7.10	— 7.40
Queen of the Meadow .....	lb.	.08	— .09
Rose, red .....	lb.	1.25	— 1.30
Rosemary .....	lb.	.13	— .14
Rue .....	lb.	.38½	— .48
*Sage, stemless, Austrian .....	lb.	—	—
*Grinding .....	lb.	.25	— .26
Greek, stemless .....	lb.	.19	— .19½
Spanish .....	lb.	.19½	— .20
Savory .....	lb.	.79	— .82
Senna, Alexandria, whole .....	lb.	.66	— .73
Half Leaf .....	lb.	.39	— .40
Siftings .....	lb.	.40	— .41
Powdered .....	lb.	.12½	— .20
Tinnevely .....	lb.	.17	— .19
Pods .....	lb.	.25	— .27
Squaw Vine .....	lb.	.15½	— .17½
Skullcap .....	lb.	.20½	— .22
Spear-mint, American .....	lb.	.22½	— .23½
Stramonium .....	lb.	.09	— .11
Tansy .....	lb.	.08½	— .09½
Thyme Spanish .....	lb.	.12½	— .13
*French .....	lb.	.05	— .06
Uva Ursi .....	lb.	.06½	— .07
Witch Hazel .....	lb.	.24	— .27
Wormwood .....	lb.	.06½	— .07½
Yerba Santa .....	lb.	—	—

## ROOTS

Aconite, English .....	lb.	.45	— .46
Powdered .....	lb.	.70	— .74
German .....	lb.	.69	— .75
*Powdered .....	lb.	.74	— .80
Alkanet .....	lb.	1.80	— 1.85
Althaea, cut .....	lb.	.50	— .54
Whole .....	lb.	.37	— .40
Angelica, American .....	lb.	.45	— .50
*German .....	lb.	—	—
Arnica .....	lb.	.70	— .78
Arrowroot, American .....	lb.	.14	— .15
Bermuda .....	lb.	.50	— .51
St. Vincent .....	lb.	.14	— .15
Bamboo Brier .....	lb.	.05	— .07
Bearsfoot .....	lb.	.04½	— .05
Belladonna .....	lb.	3.50	— 3.75
Powdered .....	lb.	3.55	— 3.80
Berberis, ag. .....	lb.	.16	— .18
Beth .....	lb.	.16	— .20
Bitter .....	lb.	.16	— .18
Beth .....	lb.	.16	— .20
Blood .....	lb.	.20	— .23
*Nominal .....	lb.	—	—

# Drugs & Chemicals, Heavy Chemicals and Dyestuffs in Original Packages

Blueflag .....	lb.	27	—	30
Bryonia .....	lb.	39	—	50
Burdock, Imported .....	lb.	19	—	24
American .....	lb.	16	—	19
Calamus, bleached .....	lb.	1.40	—	2.90
Unbleached, natural .....	lb.	24	—	26
Cohosh, black .....	lb.	15	—	18
Blue .....	lb.	08	—	10
Colchicum .....	lb.	2.75	—	3.00
Colombo, whole .....	lb.	15	—	18
Comfrey .....	lb.	15	—	16
Culver's .....	lb.	15	—	16
Cranesbill see Geranium.				
Dandelion, English .....	lb.	40	—	42
American .....	lb.	35	—	38
Doggrass Dom.-Rock Co. ....	lb.	75	—	95
Cut .....	lb.	28	—	32
Echinacea .....	lb.	28	—	32
Elecampane .....	lb.	09	—	10
Galangal .....	lb.	18	—	20
Gelsemium .....	lb.	13	—	15
<b>Gentian</b> .....	lb.	14	—	16
Powdered .....	lb.	18	—	20
Geranium .....	lb.	09	—	10
Ginger, Jamaica, unbleached ..	lb.	18	—	22
Bleached .....	lb.	24	—	25
Ginseng, Cultivated .....	lb.	3.00	—	5.00
Wild, Eastern .....	lb.	10.00	—	12.00
Northwestern .....	lb.	15.00	—	18.00
Southern .....	lb.	12.00	—	15.00
Golden Seal .....	lb.	5.30	—	5.35
Powdered .....	lb.	5.75	—	6.00
Hellebore, Black .....	lb.	1.25	—	1.35
White, Domestic .....	lb.	26	—	29
Powdered .....	lb.	24	—	26
Imported .....	lb.	40	—	44
Ipecac, Cartagena .....	lb.	2.95	—	3.05
Powdered .....	lb.	3.00	—	3.05
Rio .....	lb.	3.05	—	3.20
Jalap, whole .....	lb.	48	—	51
Powdered .....	lb.	53	—	54
Kava Kava .....	lb.	1.75	—	1.9
Lady Slipper .....	lb.	80	—	90
Licorice, Russian, cut .....	lb.	80	—	90
Spanish natural, bales .....	lb.	1.75	—	1.85
Selected .....	lb.	25	—	26
Powdered .....	lb.	19	—	23
Lovage, American .....	lb.	40	—	50
Manaca .....	lb.	25	—	27
Mandrake .....	lb.	08	—	12
Musk, Russian .....	lb.	2.60	—	2.65
Oris, Florentine, bold .....	lb.	20	—	21
Verona .....	lb.	17	—	18
Finger .....	lb.	1.95	—	2.00
Pareira Brava .....	lb.	—	—	40
Pellitory .....	lb.	29	—	31
Pink, true .....	lb.	41	—	42
Plaurisy .....	lb.	21	—	22
Poke .....	lb.	04	—	04 1/2
Rhatany .....	lb.	15	—	17
Rhubarb Shensi .....	lb.	74	—	79
Cuts .....	lb.	41	—	65
High Dried .....	lb.	26	—	27
Sarsaparilla, Honduras .....	lb.	69	—	74
American .....	lb.	20	—	22
Mexican .....	lb.	58	—	65
Senega, Northern .....	lb.	78	—	83
Southern .....	lb.	90	—	95
Serpentaria .....	lb.	45	—	50
Skunk Cabbage .....	lb.	15	—	18
*Snake, Black .....	lb.	34	—	35
Canada natural .....	lb.	34	—	38
Stripped .....	lb.	40	—	46
Spikenard .....	lb.	30	—	40
Squill, white .....	lb.	15	—	16
Stillingia .....	lb.	12	—	14
Stone .....	lb.	—	—	07
Turmeric, Aleppy .....	lb.	10 1/2	—	11
China .....	lb.	0.75	—	0.75 1/2
Madras .....	lb.	0.084	—	0.094
Unicorn false (helonias) .....	lb.	33	—	39
True (Aletris) .....	lb.	40	—	43
Valerian, Belgian .....	lb.	1.10	—	1.20
*English .....	lb.	—	—	—
*German .....	lb.	—	—	—
*Japanese .....	lb.	—	—	—
Yellow Dock .....	lb.	11	—	14
Domestic .....	lb.	—	—	—
Yellow Parilla .....	lb.	09	—	11

## SEEDS

*Anise, Levant .....	lb.	23 1/2	—	24
Spanish .....	lb.	31	—	32
Star .....	lb.	56 1/2	—	57
Caraway, African .....	lb.	—	—	—
* Dutch .....	lb.	—	—	—
Cardamoms, bleached .....	lb.	75	—	110

Celery .....	lb.	30 1/2	—	32 1/2
Colchicum .....	lb.	3.45	—	3.60
Conium .....	lb.	54	—	59
Coriander, Natural .....	lb.	15 1/2	—	15 1/2
Bleached, Domestic .....	lb.	17 1/2	—	18
Bombay .....	lb.	14 1/2	—	15
Cumin, Levant .....	lb.	18	—	18 1/2
Malta .....	lb.	17 1/2	—	18
Mogador .....	lb.	18 1/2	—	18 1/2
Morocco .....	lb.	16 1/2	—	16 1/2
Dill .....	lb.	21	—	21 1/2
Fennel, French .....	lb.	14 1/2	—	15
*German, small .....	lb.	—	—	—
*Roumanian, small .....	lb.	—	—	—
Flax, whole .....	per bbl.	14.00	—	14.25
Ground .....	lb.	0.7 1/2	—	0.8
Foenugreek .....	lb.	11 1/2	—	11 1/2
Domestic .....	lb.	10	—	10 1/2
Hemp, Manchurian .....	lb.	0.5 1/2	—	0.5 1/2
*Russian .....	lb.	—	—	—
Job's Tears, white .....	lb.	07	—	08
Larkspur .....	lb.	22 1/2	—	25
Lobelia .....	lb.	21 1/2	—	23 1/2
Mustard, Bari, Brown .....	lb.	—	—	—
Bombay, Brown .....	lb.	15	—	15 1/2
California, brown .....	lb.	16	—	16 1/2
Japanese .....	lb.	11	—	11 1/2
Dutch, yellow .....	lb.	16 1/2	—	17 1/2
English, yellow .....	lb.	20	—	21
*German, yellow .....	lb.	—	—	—
Parsley .....	lb.	17 1/2	—	19 1/2
Poppy, Dutch .....	lb.	70	—	71
Russian, blue .....	lb.	42	—	42 1/2
Indian .....	lb.	—	—	—
Rape, English .....	lb.	0.9 1/2	—	1.1 1/2
Japanese .....	lb.	10	—	10 1/2
Domestic .....	lb.	1.65	—	1.70
*Strophanthus, Hispidus .....	lb.	1.85	—	1.95
Kombe .....	lb.	0.6 1/2	—	0.6 1/2
Sunflower, large .....	lb.	06	—	06 1/2
Small .....	lb.	06	—	06 1/2
Worm, American .....	lb.	0.5 1/2	—	0.6
Levant .....	lb.	59	—	67

## SPICES

Cassia, Batavia, No. 1 .....	lb.	23 1/2	—	24
China, Selected, cs .....	lb.	16 1/2	—	16 1/2
Saigon genuine .....	lb.	49	—	50
Capsicum, African .....	lb.	15	—	16
Japan .....	lb.	11 1/2	—	12
Cassia Buds .....	lb.	19	—	20
Chilies, Japan .....	lb.	13 1/2	—	15
Mombasa .....	lb.	25	—	26
Cinnamon, Ceylon .....	lb.	28	—	32
Cloves, Amboyna .....	lb.	52	—	53
Zanzibar .....	lb.	48	—	50
Ginger, African .....	lb.	14 1/2	—	14 1/2
Cochin .....	lb.	19	—	21
Jamaica, bleached .....	lb.	24	—	25
Unbleached .....	lb.	16 1/2	—	22
Japan .....	lb.	13	—	13 1/2
Mace, Banda, No. 1 .....	lb.	51	—	52
Batavia, No. 2 .....	lb.	46	—	47
Nutmegs, 110s .....	lb.	26	—	26 1/2
Paprika, Hungarian .....	lb.	27	—	28
Spanish .....	lb.	20	—	24 1/2
Pepper, black, Sing. ....	lb.	23 1/2	—	24
White .....	lb.	29	—	29 1/2
Pimento .....	lb.	0.6 1/2	—	0.6 1/2

## WAXES

Bees, white .....	lb.	60	—	65
Yellow, crude .....	lb.	38	—	40
Yellow, refined .....	lb.	44	—	46
*Candelilla .....	lb.	43	—	45
*Carnauba, Flor. ....	lb.	70	—	75
No. 1 .....	lb.	71	—	74
No. 2 .....	lb.	61	—	63
No. 3 .....	lb.	53	—	55
Ceresin, Yellow .....	lb.	15	—	20
White .....	lb.	18	—	20
Japan .....	lb.	17 1/2	—	18
*Montan, crude .....	lb.	—	—	28
Substitute .....	lb.	—	—	75
Ozokerite, crude, brown .....	lb.	65	—	75
*Green .....	lb.	85	—	85
*Refined, white .....	lb.	80	—	85
*Domestic .....	lb.	88	—	90
Refined, yellow .....	lb.	70	—	80
Paraffin, ref'd 120 deg. m.p. lb.	lb.	11 1/2	—	12 1/2
Foreign, 130 deg. m.p. ....	lb.	14	—	14 1/2
Stearic Acid .....	lb.	22 1/2	—	23
Single pressed .....	lb.	23 1/2	—	24
Double pressed .....	lb.	25	—	27
Triple pressed .....	lb.	—	—	—
*Nominal.				

## Heavy Chemicals

Acetic acid, 28 p.c.	lb.	0.54	—	0.54
56 p.c.	lb.	11	—	12 1/2
70 p.c.	lb.	14 1/2	—	15 1/2
80 p.c.	lb.	19 1/2	—	21 1/2
Glacial	lb.	34 1/2	—	36
Alum, ammonia, lump	lb.	0.04	—	0.04
Ground	lb.	0.04	—	0.05
Powdered	lb.	0.04	—	0.05
Potash, lump	lb.	0.07	—	0.08
Chrom.	lb.	21	—	22 1/2
Ground	lb.	0.08	—	0.09
Powdered	lb.	0.08	—	0.09
Soda, Ground	100 lbs.	—	—	6.38
Aluminum chloride, liq.	lb.	0.04	—	0.05
Sulph., high grade	lb.	0.03	—	0.04
Low grade	lb.	0.02	—	0.03
Ammonia, Anhydrous	lb.	—	—	25
Ammonia Water, 26 deg., car lb.	lb.	0.06	—	0.07
20 deg., carboys	lb.	0.05	—	0.05 1/2
18 deg., carboys	lb.	0.04	—	0.05
16 deg., carboys	lb.	—	—	0.04
Ammonium chloride, U.S.P.	lb.	19	—	21
Sal Ammoniac, gray	lb.	19	—	20
Granulated, white	lb.	15 1/2	—	16
Lump	lb.	17	—	18 1/2
Sulphate, foreign	100 lbs.	—	—	—
Domestic	100 lbs.	0.03 1/2	—	0.03 1/2
Antimony Salts, 75 p.c.	lb.	—	—	—
65 p. c.	lb.	—	—	—
47 p. c.	lb.	—	—	—
Blanc Fixe	lb.	0.04 1/2	—	0.05
Barium, chloride	70.00	—	—	90.00
Dioxide	lb.	28	—	30
Nitrate	lb.	41 1/2	—	42
Barytes, floated, white	ton	30.00	—	35.00
Off color	ton	14.00	—	18.00
Bleaching powder, 35 p.c.	lb.	0.02 1/2	—	0.03
Calcium Acetate, crude 100 lbs.	6.00	—	—	6.05
Carbide	ton	70.00	—	73.00
Carbonate	lb.	—	—	—
Chloride, solid, f.o.b. N.Y.	ton	28.00	—	30.00
Granulated, f.o.b. N. Y.	ton	30.00	—	34.00
Solid, second hands	ton	30.00	—	34.00
Gran. second hands	ton	40.00	—	45.00
Sulphate, 98-99 p.c.	lb.	0.09	—	0.09 1/2
Carbon tetrachloride	lb.	15 1/2	—	16
Copper Carbonate	lb.	33	—	35
Subacetate (Verdigris)	lb.	40	—	42
Powdered	lb.	40	—	42
Sulphate, 98-99 p.c.	lb.	0.09 1/2	—	0.09 1/2
Second hands	lb.	0.08 1/2	—	0.09
Powdered	lb.	1.10	—	1.25
Copperas, f.o.b. works.	100 lbs.	2.65	—	2.75
Fusel Oil, crude	gal.	2.65	—	2.75
Refined	gal.	3.75	—	4.00
Hydrofluoric, 30 p.c. in bbls.	lb.	—	—	05
48 p. c. in carboys	lb.	—	—	09
52 p. c. in carboys	lb.	—	—	10
Lead, Acetate, brown sugar	lb.	12 1/2	—	13 1/2
White cryst.	lb.	16 1/2	—	17 1/2
Broken Cakes	lb.	15 1/2	—	16 1/2
Granulated	lb.	16 1/2	—	17 1/2
Arsenate, powdered	lb.	31	—	34
Paste	lb.	15	—	17
*Nitrate	lb.	Nominal	—	Nominal
Oxide, Litharge, Amer. pd.	lb.	0.09 1/2	—	0.09 1/2
Red, American	lb.	—	—	10 1/2
Foreign	lb.	—	—	—
White, Basic Carb., Amer.	lb.	—	—	0.09 1/2
in Oil, 100 lbs. or over.	lb.	—	—	10 1/2
English	lb.	—	—	0.08 1/2
Basic Sulphate	lb.	—	—	0.08 1/2
Magnesite, f.o.b. Cal.	42.00	—	—	44.00
f. o. b. N. Y.	65.00	—	—	70.00
Muriatic acid,				
18 deg. carboys	lb.	0.02	—	0.02 1/2
20 deg. carboys	lb.	0.03	—	0.04
22 deg. carboys	lb.	0.04	—	0.04
Nitric acid, 36 deg. carboys	lb.	0.07	—	0.07 1/2
38 deg. carboys	lb.	0.07 1/2	—	0.08
40 deg. carboys	lb.	0.08	—	0.09
42 deg. carboys	lb.	0.09	—	0.09 1/2
42 deg. carboys	lb.	0.09 1/2	—	0.10
Aqua Fortis, 36 deg. carb. lb.	lb.	—	—	0.05 1/2
38 deg. carboys	lb.	—	—	0.05 1/2
40 deg. carboys	lb.	—	—	0.06
42 deg. carboys	lb.	—	—	0.06 1/2
Plaster of Paris	bbbl.	1.50	—	1.76
True Dental	bbbl.	1.75	—	2.00
Potassium Bichromate	lb.	44	—	43
Potash Caustic, 88-92	lb.	81 1/2	—	82 1/2
Carbonate, calc	lb.	68	75	75
Chlorate, cryst.	lb.	41 1/2	—	42 1/2
Powdered	lb.	41	—	42
Muriatic basis 30.0 per cent	ton	350.00	—	375.00
Prussiate, red	lb.	2.25	—	2.60
Yellow	lb.	1.25	—	1.30
*Nominal.				

## Drugs &amp; Chemicals, Heavy Chemicals and Dyestuffs in Original Packages

Saltpetre, Granulated .....	lb.	28½	—	29
Refined .....	lb.	31¼	—	31½
Soda Ash, 58 p.c. in bags 100 lbs.	3.00	—	3.15	—
In bbls 100 lbs.	3.25	—	4.00	—
Caustic, dom., 75 p.c. 100 lbs.	5.50	—	6.25	—
Powd. or gran., 76 p.c.	100 lbs.	8.10	—	8.40
*Sodium Bichromate .....	lb.	Nominal	—	—
Bisulphate .....	lb.	—	—	—
Carbonate, Sal. Soda, Am. 100 lbs.	1.15	—	1.25	—
Chlorate .....	lb.	.18	—	.20½
Cyanide .....	lb.	.38	—	.40
Hyposulphite, bbls. 100 lbs.	2.25	—	3.00	—
Kegs .....	100 lbs.	2.00	—	2.25
Nitrate, tech. 100 lbs.	4.40	—	4.50	—
Refined .....	lb.	.06½	—	.06¾
Nitrite .....	lb.	.34	—	.35
Prussiate, Yellow .....	lb.	.37½	—	.38½
Silicate, 60 p.c. 100 lbs.	3.75	—	4.25	—
Silicate, 40 p.c. 100 lbs.	2.25	—	2.75	—
Sulph., Glauber's salt 100 lbs.	1.00	—	1.15	—
Sulphide, 60-65p.c. cryst. lb.	.04½	—	.05¾	—
60 p.c. .....	per 100 lbs.	3.85	—	4.00
Sulphur (crude) f.o.b. N.Y. ton	45.00	—	50.00	—
f. o. b. Baltimore .....	ton	45.00	—	50.00
Sulphuric Acid .....	lb.	Nominal	—	—
60 deg. Pyrite .....	ton	41.00	—	42.00
66 deg. Brimstone .....	ton	75.00	—	90.00
Oleum .....	ton	3.00	—	3.50
Battery Acid, car's per 100 lbs.	3.00	—	3.50	—
*Nominal.				

## Dyestuffs, Tanning Materials and Accessories

COAL-TAR CRUDES AND INTERMEDIATES				
Acid Benzoic .....	lb.	5.50	—	6.00
*Acid Benzoic Crude .....	lb.	Nominal	—	—
Acid H .....	lb.	2.25	—	2.75
Acid Metanilic .....	lb.	1.40	—	1.60
Acid, Naphthionic, crude .....	lb.	1.10	—	1.20
Refined .....	lb.	1.40	—	1.60
Acid Naphthylamine sulphate .....	lb.	—	—	—
Acid Sulphanilic, crude .....	lb.	.32	—	.34
Refined .....	lb.	.40	—	.44
p-Amidophenol Base .....	lb.	4.00	—	4.50
p-Amidophenol Hydrochloride .....	lb.	4.75	—	5.25
p-Aminoazobenzene .....	lb.	1.75	—	1.85
Aniline Oil, drums extra .....	lb.	.27	—	.28
Aniline Salts .....	lb.	.33	—	.35
Aniline for red .....	lb.	1.10	—	1.15
*Anthracene (80 p.c.) .....	lb.	Nominal	—	—
Anthraquinone .....	lb.	3.80	—	5.00
Benzaldehyde .....	lb.	4.50	—	5.50
Benzidine Base .....	lb.	1.80	—	1.85
Benzidine Sulphate .....	lb.	1.30	—	1.50
Benzoate of Soda .....	lb.	5.00	—	5.50
Benzol, C. P. .....	gal.	.35	—	.37
*Benzol (90 p.c.) .....	gal.	.35	—	.36½
Benzylchloride .....	lb.	2.25	—	2.50
Chlorobenzol .....	lb.	—	—	.31
Cumidine .....	lb.	9.00	—	10.00
Diamedophenol .....	lb.	—	—	—
o-Dianisidine .....	lb.	.35	—	.40
Dichlorobenzol .....	lb.	.13	—	.14
o-Dichlorobenzol .....	lb.	.13	—	.14
Diethylaniline .....	lb.	4.50	—	5.50
Dimethylaniline .....	lb.	.65	—	.70
Dinitrobenzol .....	lb.	.33	—	.35
m-Dinitrobenzene .....	lb.	.45	—	.50
Dinitrochlorobenzene .....	lb.	.50	—	.56
Dinitronaphthalene .....	lb.	.44	—	.75
Dinitrophenol .....	lb.	.52	—	.56
*Dinitrotoluidine .....	lb.	.59	—	.69
Diphenylamine .....	lb.	.90	—	1.05
Dioxynaphthalene .....	lb.	—	—	—
Hydrazobenzene .....	lb.	1.50	—	2.00
Induline .....	lb.	2.00	—	2.25
Methylantranquinone .....	lb.	—	—	—
Monodinitrochlorobenzol .....	lb.	.48	—	.52
Monothylaniline .....	lb.	1.00	—	1.25
Naphthalene, flake .....	lb.	1.05	—	1.25
Balls .....	lb.	.13	—	.14
Naphthalenediamine .....	lb.	1.75	—	2.10
a-Naphthol .....	lb.	.65	—	.70
b-Naphthol, Technical .....	lb.	.85	—	.90
Sublimed .....	lb.	.62	—	.65
a-Naphthylamine .....	lb.	1.65	—	1.75
b-Naphthylamine .....	lb.	1.05	—	1.20
Nitrobenzene .....	lb.	.20	—	.22
o-Nitrochlorobenzol .....	lb.	.50	—	.56
Nitronaphthalene .....	lb.	.44	—	.75
o-Nitrotoluidine .....	lb.	1.50	—	1.75
Nitrotoluidine .....	lb.	.55	—	.65
o-Nitrotoluidine .....	lb.	.75	—	.85
m-Phenylenediamine .....	lb.	1.15	—	1.25
Phenol .....	lb.	.55	—	.57
p-Phenylenediamine .....	lb.	3.50	—	4.50
Phthalic Anhydride .....	lb.	4.75	—	5.75
Pseudo-Cumol .....	lb.	—	—	—
*Nominal.				

## WHERE TO BUY

**E. F. DREW & CO., Inc.**  
50 BROAD ST. NEW YORK

Aniline Dyestuffs  
Dyewood Extracts  
Industrial Oils  
Chemicals

Resorcin, crystals, U.S.P. ....	lb.	9.50	—	10.00
Resorein, Technical .....	lb.	6.00	—	6.25
Tetranitromethylaniline .....	lb.	2.50	—	2.83
Tolidin .....	lb.	2.50	—	2.83
o-Toluidine .....	lb.	1.00	—	1.10
p-Toluidine .....	lb.	2.25	—	2.40
*Toluol, pure .....	gal.	5.75	—	6.00
*Toluol, Commercial, 90 p.c. gal.	5.50	—	5.75	—
m-Toluylenediamine .....	lb.	1.70	—	1.75
Xylene, pure .....	gal.	1.00	—	1.25
Xylene, Com. ....	gal.	.35	—	.40
Xylol .....	gal.	.35	—	.40

## COAL-TAR COLORS

Acid Black .....	lb.	1.50	—	1.75
Acid Blue .....	lb.	2.25	—	3.00
Acid Brown .....	lb.	2.75	—	3.00
Acid Fuchsin .....	lb.	7.50	—	8.50
Acid Orange .....	lb.	.50	—	.80
Acid Orange II .....	lb.	.65	—	1.10
Acid Orange III .....	lb.	1.25	—	1.50
Acid Red .....	lb.	1.30	—	1.80
Acid Scarlet .....	lb.	1.10	—	1.75
Alpine Yellow .....	lb.	5.00	—	6.00
Alizarin Blue .....	lb.	6.00	—	8.00
Alizarin Blue, bright .....	lb.	8.50	—	9.50
Alizarin Blue, medium .....	lb.	6.00	—	7.50
Alizarin Brown, conc. ....	lb.	7.50	—	8.50
Alizarin Orange .....	lb.	6.00	—	8.00
Alpine Red .....	lb.	6.50	—	8.00
Azo Carmine .....	lb.	5.25	—	6.00
Azo Yellow .....	lb.	2.00	—	3.50
Azo Yellow, green shade .....	lb.	3.50	—	4.00
Azo Yellow, red shade .....	lb.	2.75	—	5.00
Auramine .....	lb.	3.50	—	5.00
Bismarck Brown Y .....	lb.	.90	—	1.10
Bismarck Brown F .....	lb.	1.25	—	1.50
Bismarck Brown FF conc. ....	lb.	2.00	—	2.50
Bismarck Brown 3R .....	lb.	2.25	—	3.25
Bismarck Brown R .....	lb.	1.10	—	1.50
Bright Red .....	lb.	2.75	—	3.25
Chrome Blue .....	lb.	2.60	—	3.00
Chrome Red .....	lb.	2.30	—	3.00
Crysamine Yellow .....	lb.	1.70	—	2.00
Chrysoidine R .....	lb.	1.00	—	1.50
Chrysoidine Y .....	lb.	.90	—	1.00
Congo Red .....	lb.	2.25	—	2.75
Crystal Violet .....	lb.	6.50	—	7.50
Direct Black .....	lb.	.75	—	.85
Direct Blue .....	lb.	2.50	—	3.50
Direct Sky Blue .....	lb.	3.25	—	6.00
Direct Brown .....	lb.	1.75	—	2.50
Direct Bordeaux .....	lb.	2.50	—	4.25
Direct Fast Red .....	lb.	3.25	—	5.25
Direct Red .....	lb.	2.10	—	2.50
Direct Yellow .....	lb.	1.75	—	2.25
Direct Fast Yellow .....	lb.	3.00	—	4.00
Direct Violet .....	lb.	3.00	—	4.50
Fast Red, 6B extra, cont. ....	lb.	4.60	—	5.00
T extra, contract .....	lb.	2.00	—	3.75
Fast Scarlet, contract .....	lb.	2.75	—	3.25
Fur Black, extra .....	lb.	2.50	—	3.00
Fur Brown B .....	lb.	2.00	—	3.10
Fur Brown GG .....	lb.	2.50	—	4.00
Fuchsine Crystals .....	lb.	8.00	—	15.00
Green Crystals, Brilliant .....	lb.	11.00	—	13.00
Indigo 20 p.c. paste .....	lb.	1.60	—	2.00
Indigotine, conc. ....	lb.	4.25	—	5.00
Indigotine, paste .....	lb.	1.50	—	2.50
Induline .....	lb.	1.10	—	1.75
Magenta .....	lb.	10.00	—	12.00
Metanil Yellow .....	lb.	1.80	—	2.40
Medium Green .....	lb.	5.00	—	6.00
Methylene Blue, tech. ....	lb.	3.25	—	4.25
Methyl Violet .....	lb.	3.25	—	3.75
Naphthol Green .....	lb.	3.00	—	3.75
Nigrosine, Oil Sol. ....	lb.	.85	—	1.25
Nigrosine, spts. sol. ....	lb.	.75	—	1.25
Nigrosine water sol., blue. ....	lb.	.75	—	1.05
Jet .....	lb.	.80	—	1.00
Naphthylamine Red .....	lb.	6.50	—	7.00
Oil Black .....	lb.	.85	—	1.25
Oil Orange .....	lb.	2.00	—	2.50
Oil Scarlet .....	lb.	2.00	—	2.50
Oil Yellow .....	lb.	1.88	—	2.50
Orange, R. G., contract .....	lb.	2.00	—	2.25
Orange Y, conc. ....	lb.	1.10	—	1.50
Ponceau .....	lb.	1.75	—	2.50
Scarlet 2R .....	lb.	3.50	—	4.75
Soluble Blue .....	lb.	10.00	—	15.00
Sulphur Black .....	lb.	.42	—	.60
*Nominal.				

Sulphur Black E.S. standard lb.	.90	—	1.00
Sulphur Black 100 p.c. ....lb.	1.25	—	2.00
Sulphur Black, 150 p.c. ....lb.	1.50	—	2.25
Sulphur Blue .....	2.30	—	2.75
Sulphur Blue-Black .....	2.75	—	3.25
Sulphur Brown Chestnut ....lb.	.50	.65	
Sulphur Green .....	1.60	—	2.50
Sulphur Yellow .....	1.80	—	2.50
Tartrazine, Domestic ....lb.	.60	.90	
Tartrazine, Imported .....	1.25	—	1.85
Wool Orange .....	1.00	—	2.00
Valonia, solid, 65 p.c. tan ....lb.	5.00	—	6.00
Victoria Blue, base .....	10.00	—	14.00
Victoria Green .....	13.00	—	16.00
Victoria Red .....	8.00	—	9.00
Victoria Yellow .....	6.75	—	8.25
Yellow for wool .....	1.50	—	2.25

## NATURAL DYE STUFFS

Annatto, fine .....	lb.	.33½	—	.34½
Seed .....	lb.	.11½	—	.14½
Carmine No. 40 .....	lb.	4.25	—	4.75
Cochinal .....	lb.	.54	—	.59
Gambier, see tanning. ....	lb.	2.50	—	3.25
Indigo, Bengal .....	lb.	2.75	—	3.00
Indigo, Guatemaia .....	lb.	2.25	—	2.75
Kurpahs .....	lb.	2.75	—	3.10
Madras .....	lb.	1.10	—	1.50
Madder, Dutch .....	lb.	.27	—	.29
Nutgalls, blue Aleppo .....	lb.	—	—	—
Chinese .....	lb.	.25	—	.26
Persian Berries .....	lb.	—	—	—
Quercitron Bark, see tanning. ....	lb.	—	—	—
Sumac, see tanning. ....	lb.	—	—	—
Turmeric, Madras .....	lb.	.08½	—	.09½
Aleppie .....	lb.	.10½	—	.11½
Pubna .....	lb.	.08½	—	.09½
China .....	lb.	.07½	—	.08½

## DYEWOODS

Barwood .....	lb.	—	—	—
Camwood, chips .....	ton	45.00	—	50.00
Fustic, sticks .....	ton	45.00	—	50.00
Chips .....	lb.	.04½	—	.05
Hyperic, chips .....	lb.	.09	—	.10
Logwood Sticks .....	lb.	36.00	—	40.00
Chips .....	lb.	.02½	—	.03½
Quercitron, see tanning. ....	lb.	—	—	—
Red Saunders, chips .....	lb.	15	—	17

## EXTRACTS

Archil, double .....	lb.	.15	—	.17
Triple .....	lb.	.18	—	.20
Concentrated .....	lb.	.21	—	.26
Cutch, Mangrove, see tanning.				
Rangoon, boxes .....	lb.	.18	—	.20
Liquid .....	lb.	.09½	—	.10
Tablet .....	lb.	.11½	—	.13
Cudbear, French .....	lb.	.20	—	.26
English .....	lb.	.38	—	.40
Concentrated .....	lb.	1.00	—	1.50
Flavine .....	lb.	1.3½	—	1.5½
Fustic .....	lb.	.13½	—	.15½
Gall .....	lb.	—	—	.18
Hematin Extract .....	lb.	.14	—	.18
Crystals .....	lb.	.24	—	.28
*Hyperic, liquid .....	lb.	.50	—	.54
Indigo, natural for cotton .....	lb.	.50	—	.54
For wool .....	lb.	.30	—	.32
Indigotine, 100 p.c. pure .....	lb.	—	—	.50
Logwood, solid .....	lb.	.19	—	.21
Crystals .....	lb.	.19	—	.21
51 deg. Twaddle .....	lb.	.09½	—	.12
Contract .....	lb.	.09	—	.10½
Osage Orange—				
Powdered .....	lb.	—	—	.25
Paste .....	lb.	.06	—	.12
Persian Berries .....	lb.	—	—	—
Quebracho, see tanning.				
Quercitron .....	lb.	.07	—	.07½



# Drugs & Chemicals, Heavy Chemicals and Dyestuffs in Original Packages

## TANNING EXTRACTS

Chestnut, ordinary, 25 p.c. tan, bbls.	lb.	.024	.024
Clarified, 25 p.c. tan, bbls.	lb.	.024	.03
Crystals, ordinary	lb.	—	—
Clarified	lb.	—	—
Gambier, 25 p.c. tan	lb.	.09%	.11
Common	lb.	.23%	.25
Cubes, No. 1	lb.	.21	.21%
No. 2	lb.	.21	.21%
Hemlock, 25 p.c. tan	lb.	.03%	.04%
Larch, 25 p.c. tan	lb.	.03	.03%
Crystals, 50 p.c. tan	lb.	.06	.07
Mangrove, 55 p.c. tan	lb.	.08	.12
Muskegon, 23-30 p.c. tan, 50 p.c. total solids	lb.	.014	.02%
Myrobalans, liq. 23-25 p.c. tan	lb.	.06	.07
Solid, 50 p.c. tan	lb.	.10	.11
Oak Bark, liquid, 23-25 p.c. tan	lb.	.03%	.04%
Quebracho, liquid, 35 p.c. tan treated	lb.	.05%	.06%
35 p.c. tan, untreated	lb.	.07%	.08
Solid, 65 p.c. tan, ordinary	lb.	.09	.11
Clarified	lb.	.10	.12
Spruce, liquid, 20 p.c. tan, 50 p.c. total solids	lb.	.01	.01%
Sumac, liquid, 25 p.c. tan	lb.	.07	.10%
Valonia, solid, 65 p.c. tan	lb.	Nominal	

## Oils

### ANIMAL AND FISH

(Carloads)

Cod Newfoundland	gal.	1.07	— 1.09
*Domestic, prime	gal.	1.00	— 1.02
Liver, Newfoundland	bbl.	90.00	— 95.00
Norwegian	bbl.	120.00	— 125.00
*Degras, American	lb.	.23	— .25
*English	lb.	.24	— .26
German	lb.	—	—
Neutral	lb.	—	—
Horse	lb.	.17	— .17%
Lard, prime winter	gal.	2.30	— 2.35
Off prime	gal.	1.85	— 1.90
Extra, No. 1	gal.	1.50	— 1.55
No. 1	gal.	1.45	— 1.50
No. 2	gal.	1.40	— 1.45
Menhaden, Light, strained	gal.	1.05	— 1.07
Yellow, bleached	gal.	1.07	— 1.09
White, bleached, winter	gal.	1.09	— 1.11
*Northern, crude	gal.	—	—
*Southern, crude, f. o. b. plant	gal.	—	—
Neatsfoot, 20 deg.	gal.	2.90	— 3.05
30 deg., cold test	gal.	2.85	— 2.95
40 deg., cold test	gal.	2.75	— 2.85
Dark	gal.	1.75	— 1.80
Prime	gal.	2.00	— 2.25
Oleo Oil	lb.	.22	— .24
*Pompeo, body	gal.	.80	— .85
*Jaw	gal.	.24	— .25
Red, (Crude Oleic Acid)	lb.	.17	— .17%
Saponified	lb.	.17	— .17%
Sod Oil	lb.	.11	— .12
*Sperm, bleached winter	gal.	—	—
38 deg., cold tes.	gal.	—	— 2.15
45 deg., cold test	gal.	—	— 2.10
Natural winter, 38 deg., cold test	gal.	—	— 2.10
Stearic, single pressed	lb.	.23	— .23%
Double pressed	lb.	.24	— .24%
Triple pressed	lb.	.25%	— .24%
Tallow, acidless	gal.	1.60	— 1.65
*Prime	gal.	1.55	— 1.60
*Whale, natural	gal.	1.15	— 1.20
*Bleached, winter	gal.	1.20	— 1.25

### VEGETABLE OILS

*Castor, No. 1 bbls.	lb.	—	— .30
Cases	lb.	—	— .31
No. 3	lb.	.28%	— .29%
Cocanut, Ceylon, bbls.	lb.	.18%	— .18%
*Ceylon, Tanks	lb.	—	— .18
Cochin, bbls.	lb.	.19%	— .19%
Tanks	lb.	.18%	— .19
*Corn, refined, bbls.	lb.	22.32	— 22.52
*Crude, bbls.	lb.	.18%	— .19
*Cottonseed, Crude, f. o. b. mills	lb.	—	— .18
Summer, yellow, prime	lb.	.21	— .22
*White	lb.	—	—
*Winter, yellow	lb.	—	— 22%
Linseed, raw, car lots	gal.	1.30	— 1.32
5-bbl. lots	gal.	1.31	— 1.33
Boiled, 5-bbl. lots	gal.	1.32	— 1.34
Double Boiled, 5-bbl. lots	gal.	1.33	— 1.35
*Olive, denatured	gal.	3.00	— 3.10
*Foots	lb.	.38	— .40
*Nominal.	lb.	—	—

## WHERE TO BUY

### Chas. Morningstar & Co., Inc.

WOOLWORTH BLDG. - BARCLAY-6005-6

## STARCHES DEXTRINES ALBUMEN GLUCOSE

*Palm Lagos, casks	lb.	.32	— .33
*Benin	lb.	.30	— .31
*Niger	lb.	.29	— .30
*Palm Kernel, domestic	lb.	—	—
*Imported	lb.	—	—
Peanut Oil, edible	gal.	1.70	— 1.73
*Crude f. o. b. mills	gal.	—	— 1.40
Pine Oil, white steam	gal.	—	—
Yellow, steam	gal.	.54	— .55
*Poppy Seed	gal.	—	—
*Rapeseed, ref'd. bbls.	gal.	—	— 1.75
Blown	gal.	1.75	— 1.85
Rosin, oil, first rect.	gal.	.35	— .40
Second	gal.	.42	— .45
*Sesame, domestic	gal.	2.50	— 2.75
*Imported	gal.	—	—
*Soya Bean, Manchurian	lb.	.18%	— .18%
Tar Oil, gen. dist.	lb.	.33	— .34
Commercial	lb.	.25	— .27

## MINERAL

Black, reduced, 29 gravity	gal.	1.3%	— .14
25-30 cold test	gal.	.14	— .15
29 gravity, 15 cold test	gal.	.13	— .14
Summer	gal.	.21	— .26
Cylinder, light, filtered	gal.	.18	— .19
Dark, filtered	gal.	.26	— .30
Extra cold test	gal.	.15	— .18
Dark steam, refined	gal.	.26%	— .27
Neutral, W. Va. 29 grav.	gal.	.21%	— .22
Neutral, filtered lemon, 32@34 gravity	gal.	.33	— .34
White 30@31 gravity	gal.	.29%	— .30
Paraffin, high viscosity	gal.	.18%	— .22
90@95 sp. gr.	gal.	.18	— .19
Red Paraffin	gal.	.24	— .25
Spindle, filtered	gal.	.23%	— .24
No. 200	gal.	.23	— .23%
No. 110	gal.	—	—

## Miscellaneous

### NAVAL STORES

(Carloads)

(Caribbees)			
Spirits Turpentine in bbls.	gal.	.47	— .47½
Wood Turpentine, steam dis- tilled, bbls.	gal.	.42	— .44½
Turpentine, Destructive dis- tilled, bbls.	gal.	.34	— .37½
Pitch, prime	200-lb. bbl.	4.50	— 4.75
Tar, kiln-burnt, pure 50-gal bbls.		13.50	— 14.00
Rosin, com., to g'd	80-bbl.	6.70	— 6.75

## SHELLAC

D. C.	lb.	.73	— .75
Diamond "I"	lb.	—	— .72
V. S. O.	lb.	.73	— .75
Fine Orange	lb.	.65	— .70
Second Orange	lb.	.61	— .65
T. N.	lb.	.59	— .60
A. C. Garnet	lb.	.59	— .60
Button	lb.	—	—
Regular, bleached	lb.	—	— .54
Bone, dry	lb.	—	— .64

## OIL CAKE AND MEAL

Cottonseed Cake, f. o. b. Texas	—	— 53.50
f. o. b. New Orleans	—	—
Cottonseed, Meal, f. o. b. Atlanta	—	— 47.50
Columbia	—	— 48.50
New Orleans	ton	47.00 — 49.00
Corn Cake	short ton	37.00 — 40.00
Meal	short ton	41.00 — 42.00
Linseed cake, dom.	short ton	52.00 — 53.00
Linseed Meal	short ton	57.00 — 58.00

## SALT PRODUCTS

Salt, fine	280 lb. bbls.	—	— 2.65
200 lb. sacks	—	—	— 1.75
Turk's Island—	140 lb. bags	—	— 1.13
Coarse	140 lb. bags	—	— 1.13

## COCOA

Bahia	lb.	.10	— .11
Caracas	lb.	.12%	— .13
Hayti	lb.	.09	— .09%
Maracaibo	lb.	.20	— .22
Trinidad	lb.	.12%	— .13

\*Nominal.  
\*Buyers' Tanks.

## DEXTRINES AND STARCHES

Imported Potato Starch	lb.	.12	— .12%
Duty Paid	lb.	—	— .12
Domestic Potato Starch	lb.	—	—
Potato Dextrine white or canary	lb.	—	— .14%
Corn Dextrine white or yellow, spot	lb.	.07%	— .07 1-3
Buffalo Corn Starch	lb.	—	— .0514
Globe Pearl Starch	lb.	—	— .04%
Globe British Gum	lb.	—	— .06%

## \*REFINED SUGAR

(Prices in Barrels)

	Amer. Fed. War	Nat. bule eral ner
Powdered	7.60 7.60 7.60 7.60 7.60	
XXXX	7.65 7.65 7.65 7.65 7.65	
Confectioners A	7.35 7.35 — 7.35 7.35	
Standard Gran.	7.50 7.50 7.50 7.50 7.50	
* Prices fixed by Government.		

## Soap Makers' Materials

### ANIMAL AND FISH OILS

*Menhaden, crude, f. o. b. mills	gal.	—	— .95
Light, strained	gal.	1.05	— 1.07
Yellow, bleached	gal.	1.07	— 1.09
White, bleached, winter	gal.	1.09	— 1.11
Neatsfoot, 20 deg.	gal.	2.90	— 3.05
30 deg., cold test	gal.	2.85	— 2.95
40 deg., cold test	gal.	2.75	— 2.85
Dark	gal.	1.75	— 1.80
Prime	gal.	2.00	— 2.25
Red, (Crude oleic acid)	lb.	.17	— .17%
Saponified	lb.	—	— .17%
Stearic, single pressed	lb.	.23	— .23%
Double pressed	lb.	.24	— .24%

### VEGETABLE OILS

*Castor, No 1, bbls.	lb.	—	— .30
No. 3	lb.	.28%	— .29%
Cocanut, Ceylon, bbls	lb.	.18%	— .18%
*Ceylon, tanks	lb.	—	— .18
Cochin bbls.	lb.	.19%	— .19%
Tanks	lb.	.18%	— .19
*Corn, crude, bbls.	lb.	.18%	— .18%
Refined, barrels	lb.	22.32	— 22.52
*Cottonseed, crude, f. o. b. mills	lb.	—	— .18

Summer Yellow, prime	lb.	.21	— .22
*White	gal.	—	—
*Winter, Yellow	gal.	—	— 22%
Linseed, raw, car lots	gal.	1.30	— 1.32
5 barrel lots	gal.	1.31	— 1.33
*Olive, denatured	gal.	3.00	— 3.10
*Foots	lb.	.38	—
*Palm Lagos, casks	lb.	.32	— .33
*Niger	lb.	.29	— .30
*Palm Kernel, domestic	lb.	—	—
Peanut, edible	gal.	—	— 1.75
*Crude f. o. b. mills	gal.	—	— 1.40
Pine, white steam	gal.	—	—
*Sesame, domestic	gal.	2.50	— 2.75
Soya Bean, Manchurian	lb.	.18%	— .18%

## GREASES, LARDS, TALLOW

(New York Markets)

Grease, white	lb.	.18	— .19
Yellow	lb.	.16	— .16%
House	lb.	.16	— .16%
Brown	lb.	.15%	— .16
Yellow, grease, stearine	lb.	.16%	— .17
White, grease, stearine	lb.	.18	— .18%
Lard, City	lb.	—	— 25%
Compound	lb.	.22%	— 23%
Stearine, lard	lb.	.27%	— 28%
Oleo	lb.	—	— .18%
Tallow, edible	lb.	.18	— .18%
City Fancy	lb.	—	— 17%
Choice Country	lb.	—	— .17

(Western Markets)

Tallow, edible	lb.	.17%	— .18
City Fancy	lb.	—	— 17%
Prime Packers	lb.	.17%	— 17%
Grease, Choice White	lb.	.17%	— 17%
"A" White	lb.	.16%	— 16%
"B" White	lb.	.16%	— 16%
Yellow	lb.	.16	— .16%
Brown	lb.	.12%	— .13%
Bone	lb.	.13%	— .14%
House	lb.	.85	— .15%
Stearine, prime oleo	lb.	.18%	— .18%
Lard	lb.	.26%	— .27

\*Nominal.  
\*Buyers' Tanks.

# Imports and Exports of Drugs and Chemicals, Dyestuffs, Etc.

Imports from Feb. 8 to Feb. 16, 1918—Exports for month of December

Owing to the strict regulations of the Treasury Department forbidding the publication of the names of importers receiving consignments and the names of ports of shipment, this feature of the service is omitted by DRUG AND CHEMICAL MARKETS during the period of the war. Subscribers interested in any special product will be assisted in locating supplies if they will communicate with the Editor.

## Imports

**ALBUMEN**—  
11,500 pounds  
25,000 pounds  
**BALSAMS**—  
5,000 pounds copaiba  
**BEANS**—  
33,673 pounds vanilla  
5,600 pounds vanilla  
2,600 pounds vanilla  
**CASEIN**—  
1,100,000 pounds  
158,600 pounds  
**CHEMICAL PREPARATIONS**—  
2,500 pounds  
1,600 pounds  
4,000 pounds  
**DYES AND DYESTUFFS**—  
3,800 pounds orchil liquor  
**ESSENTIAL OILS**—  
800 pounds cinnamon  
25,300 pounds citronella  
26,100 pounds citronella  
68,000 pounds citronella  
1,700 pounds various  
9,900 pounds peppermint  
**GALL NUTS**—  
34,500 pounds  
80,200 pounds  
**GELATIN**—  
153,339 pounds  
**GUMS**—  
77,250 pounds chicle  
**IODINE**—  
1,000 pounds resublimed  
**LEECHES**—  
350 pounds bloodsuckers  
**MAGNESIUM CARBONATE**—  
5,000 pounds  
**MEDICINAL & MISCELLANEOUS DRUG PREPARATIONS**—  
600 pounds drugs  
**NUX VOMICA**—  
29,700 pounds  
**OILS**—  
29,873 pounds fusel  
656 gallons edible olive  
7,793 gallons peanut  
10,000 gallons herring  
450 pounds lemon grass  
500 pounds lemon grass  
105,000 pounds soya bean  
**PEPSIN**—  
900 pounds  
**POTASSIUM IODIDE**—  
300 pounds  
**POTASSIUM PERMANGANATE**—  
400 pounds  
**POTASSIUM CARBONATE**—  
600 pounds  
**POTASSIUM SALTS**—  
400 pounds, various  
39,639 pounds, various  
**QUEBRACHO EXTRACT**—  
135,600 pounds

**ROOTS**—  
136 pounds ginger  
2,300 pounds jalap  
**SALTPETER**—  
180,200 pounds  
**SEED**—  
67,871 pounds flax  
13,050 pounds flax  
54,000 pounds cardamoms  
3,960 pounds cardamoms  
17,500 pounds cardamoms  
8,575 pounds castor  
4,800 pounds castor  
110,250 pounds rapeseed  
**SPICES**—  
40,000 pounds unground cassia  
90,000 pounds cinnamon  
40,000 pounds cinnamon  
30,000 pounds cinnamon  
10,150 pounds cinnamon  
**SPONGES**—  
28,900 pounds  
**TARTAR, CRUDE**—  
126,300 pounds  
73,850 pounds  
**WAX**—  
6,872 pounds bees  
53,460 pounds carnauba  
38,800 pounds carnauba  
49,700 pounds carnauba  
54,000 pounds carnauba  
49,500 pounds vegetable  
38,300 pounds vegetable  
19,000 pounds vegetable  
26,500 pounds vegetable  
**WINE LEES**—  
874,157 pounds  
1,034,176 pounds

## Exports

**ACID, CARBOLIC**—  
424 pounds, British Guiana  
46 pounds, Brazil  
**ACID, NITRIC**—  
110 pounds, Mexico  
117 pounds, Brazil  
5,780 pounds, British South Africa  
**ACID, SULPHURIC**—  
480 pounds, Hayti  
359 pounds, San Domingo  
220 pounds, Argentina  
110 pounds, Brazil  
28,000 pounds, British Guiana  
**BEEES WAX**—  
1,156 pounds, Cuba  
96 pounds, Brazil  
**CALCIUM CARBIDE**—  
662 pounds, British South Africa  
130 pounds, Australia  
130 pounds, Dutch East Indies  
77,100 pounds, Chile  
102,600 pounds, Argentina  
**COPPER SULPHATE**—  
260 pounds, Portuguese Africa  
660 pounds, Dutch East Indies  
200 pounds, Venezuela  
22,000 pounds, Uruguay  
22,000 pounds, Argentina  
**CORN STARCH**—  
132,835 pounds, British South Africa  
240,800 pounds, Scotland  
**FLAX SEED**—  
993 bushels, England  
62 bushels, Brazil  
6 bushels, San Domingo  
**GLUCOSE**—  
1,029,000 pounds, France  
**GLYCERIN**—  
50 pounds, British Guiana  
50 pounds, Para  
**LIME CHLORIDE**—  
57,365 pounds, Brazil  
480 pounds, Chile  
870 pounds, Dutch East Indies  
**MERCURY**—  
50 pounds, Argentina  
60 pounds, Colombia  
**PARAFFINE, CRUDE**—  
1,430,758 pounds, England  
554,847 pounds, Chile  
400,000 pounds, Hongkong  
**PARAFFINE, REFINED**—  
1,600 pounds, San Domingo  
204,827 pounds, Cuba  
5,000 pounds, Jamaica  
80,400 pounds, Mexico  
179,675 pounds, Scotland  
330,883 pounds, England  
89,600 pounds, Switzerland  
216,429 pounds, France  
**PARAFFIN, REFINED**—  
37,148 pounds, Peru  
39,433 pounds, Brazil  
7,695 pounds, Cuba  
4,093 pounds, Mexico  
**PARAFFINE OIL**—  
2,500 gallons, Chile  
**PEPPERMINT OIL**—  
5 pounds, Philippine Islands  
10 pounds, Hongkong  
5 pounds, Chile  
71 pounds, Argentina  
2 pounds, Jamaica  
472 pounds, Canada  
4,500 pounds, France  
55 pounds, Greece  
1,090 pounds, France  
11 pounds, Cuba  
**SODA, ASH**—  
90,686 pounds, Dutch East Indies  
9,000 pounds, Venezuela  
**SODA, CAUSTIC**—  
22,000 pounds, Dutch East Indies  
49,000 pounds, Uruguay  
384,450 pounds, Brazil  
118,000 pounds, Argentina  
**SODA, SAL**—  
22,500 pounds, Cuba  
315 pounds, British West Indies  
**SODIUM SILICATE**—  
7,139 pounds, Peru  
9,600 pounds, Venezuela  
**SULPHUR, CRUDE**—  
110 tons, Mexico  
8 tons, Trinidad  
25 tons, Cuba  
8 tons, Brazil  
**GLUCOSE**—  
153,270 pounds, British South Africa  
100 pounds, British Guiana  
392 pounds, San Domingo  
**SPONGES**—  
24 pounds, Portuguese Africa  
65 pounds, Peru  
1,333 pounds, Chile  
108 pounds, Chile  
6 pounds, Brazil  
24 pounds, San Domingo  
10 pounds, Salvador  
**ZINC OXIDE**—  
10,568 pounds, Dutch East Indies  
250 pounds, Venezuela  
4,246 pounds, Peru  
4,500 pounds, Colorado  
11,100 pounds, Chile  
2,020 pounds, Argentina  
470,500 pounds, England  
616 pounds, Panama  
800 pounds, Mexico  
4,645 pounds, Cuba

## THE PROPOSED GERMAN BOYCOTT

The proposal of the Chamber of Commerce of the United States, submitted in a referendum to its members to establish a trade boycott on Germany after the war, was vigorously dissented to in the ballot of the National Association of Manufacturers which was transmitted to Washington last week.

The question was discussed by the Merchants Association of New York, and by the Manufacturers' Council of the New Jersey State Chamber of Commerce, and by the Jersey City Chamber of Commerce,

and by the New York Chamber of Commerce. Announcement of the result of the referendum will be made from Washington in a short time.

A bill to prohibit importation of German articles of trade was introduced in the House by Representative Kelly, of Michigan. The period of prohibition is fixed at one year for every week that a state of war exists between the United States and Germany after the passage of the bill. Importation of any German article is made a felony punishable by a \$5,000 fine and not more than two years in prison or both.

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## Drug & Chemical Notes

The Steinen Dyeing Company, 417 West Twenty-fourth street, New York, has increased its capital from \$10,000 to \$25,000.

Charles Pfizer & Co., 11 Bartlett Street, Brooklyn, N. Y., have awarded a contract for alterations in their chemical works on Gerry Street, to cost \$15,000.

The Direct Sales Company, 436-38 Pratt street, Buffalo, N. Y., manufacturer of drugs, etc., is planning for extensions in its plant to cost about \$12,000.

The Verona Chemical Company, Newark, N. J., has filed plans for the construction of a one-story extension to its works at Verona and Riverside avenues.

The Kolx Co. of Delaware has appointed S. G. King, 1328 Broadway, New York, as their representative. This company was recently incorporated with a capital of \$300,000 to manufacture drugs and chemicals.

San Francisco reports the arrival of a steamer from Batavia with 265 cases of quinine, 834 packages bark, 850 packages gambier, 175 potash, 600 coca leaves.

The Imperial Chemical Manufacturing Company, 135 West Twenty-third street, New York, has leased property at 382 Lafayette street for a new establishment.

Bick & Undy, Philadelphia, chemicals and dyestuffs, have removed their offices from 119 North Front Street to the Drexel Building, to provide for increasing business.

C. G. Weiscopef, of the Charlotte Drug Co., was elected secretary-treasurer of the Michigan State Association of Ginseng Growers at the recent meeting at Grand Rapids.

The American Chemical Products Company, a Delaware corporation, has filed authorization papers to operate in New York. G. B. McLeod, 23 Liberty street, is local representative.

The Nitrogenous Chemical Company, Philadelphia, is having plans prepared for a one-story brick and concrete addition to its plant at Thirty-seventh street and Tasker avenue.

The New Jersey Legislature has passed a bill introduced by Senator McGlennon, providing that members of the Board of Pharmacy are prohibited from acting as teachers in a college of pharmacy.

The United States Industrial Alcohol Company, Baltimore, Md., is planning for the construction of a two-story addition to its chemical works at Curtis Bay, to cost about \$100,000.

The Crescent Color & Chemical Works, Eleventh avenue and Fifty-ninth street, New York, have filed authorization papers to operate in New Jersey. James Murray, West Front Street, Plainfield, will act as local representative.

The Benzol Products Company, Marcus Hook, Pa., is having plans prepared for two one-story extensions. The buildings will each be one-story, about 47 x 120 feet, and 39 x 39 feet, the latter structure to be known as Still House, No. 2.

The Worthen & Aldrich Company, Delawanna, N. J., operating a dye works, is taking bids up to Feb. 22, for the construction of an addition to its four-story reinforced-concrete plant, 80 x 160 feet. Estimated cost, \$250,000.

The Noeque Chemical Company, Philadelphia, has been incorporated in Delaware with a capital of \$450,000 to manufacture chemicals, etc. F. R. Hansell, Philadelphia; S. C. Seymour, and J. V. Pimm, Camden, N. J., are the incorporators.

The Leicester & Continental Mills, Philadelphia, have sold their properties consisting of mills, dye works, boiler plant, and other structures at 48-50 Armet Street, Germantown, to Palliser Crabtree, for a consideration of \$160,000. The new owner acquires all machinery and equipment, and, it is said, will operate the plant as heretofore.

The formal transfer of the plan of Harrison's, Inc., Philadelphia, Pa., manufacturer of chemicals, etc., to E. I. duPont de Nemours & Co., Wilmington, Del., has been effected by the recording of necessary deed. The plant consists of five large manufacturing buildings and auxiliary structures; the consideration for the property is \$400,000.

It is reported that the Chilean Government has sold to the United States \$25,000,000 worth of nitrate which was destined for Germany at the outbreak of the war, according to Juan Antonio Menchaca, Consul General for Spain at Lima, Peru. The German authorities purchased the nitrate from Sloman & Gildemeister, a Lima firm. The Germans, however, had no means of getting the supply to their munition plants after British and French war vessels had swept their commerce from the seas and the Chilean Government took over the consignment.

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